ORDER NO. EMID871207
A4

Service Manual

PCM Keyboard

SX-K500/K700

(M), (MC), (EN), (EI), (EH), (EB), (EF), (EZ), (EW), (EP), (EK), (XL), (XR), (XS), (XD), (X)

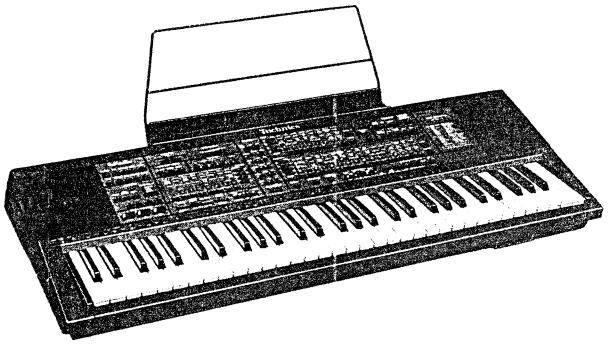

Photo: SX-K700

AREAS

(M): U.S.A.	(EP): Spain
(MC): Canada	(EK): the United Kingdom
(EN): Norway, Sweden, Denmark, Finland	(XL): New Zealand
	(XR): Australia
(EI): Italy	(XS): Malaysia, Singapore, South Africa
(EH): Holland	
(EB): Belgium	(XD): Saudi Arabia
(EF): France, Austria	(X): the Middle East, Indonessia, Hong Kong, the Philippines, Taiwan
(EZ): Germany	
(EW): Switzerland	

Specifications

		SX-K500	SX-K700
KEYBOARD		49 KEYS	61 KEYS
KEY SPLIT		○ (G2, C3, G3)	
ONE TOUCH PLAY		○	
FULLBAND SETTING COMPUTER		RECORD*, FULLBAND SETTING COMPUTER	
SEQUENCER		RECORD*, EDIT, STEP RECORD, SOLO, POLY ACCOMP/CHORD, BASS, DRUMS & CONTROL, KEYBOARD...	
VOICE SETTING COMPUTER		SET, 1~4	
CONDUCTOR		[L]...POLY, BASS [R]...SOLO, POLY	
TONES & EFFECTS	POLY/ACCOMP	P1... POP ORGAN 1, 2, SYNTH STRING, SYNTH BRASS 1, 2, 3, SYNTH LEAD 1, 2, 3, SYNTH PERCUSSIVE 1, 2, 3, SOLID GUITAR, ROCK GUITAR, ELECTRIC PIANO, ELECTRIC GRAND P2... JAZZ ORGAN 1, 2, STRINGS, TROMBONE, BRASS, TENOR SAX, ALTO SAX, CLARINET, FLUTE, STEEL DRUM, VIBETONE, CLAVI, JAZZ GUITAR, MUTE GUITAR, ELECTRIC PIANO, PIANO P3... PIPE ORGAN 1, 2, STRINGS, TROMBONE, TRUMPET, FRENCH HORN, ACCORDION, OBOE, PAN FLUTE, HARMONICA, GLOCKEN, BANJO, GUITAR, HAWAIIAN GUITAR, HARPSICHORD, PIANO MEMORY...1~16 CHORUS, SUSTAIN	
	SOLO	S1... SYNTH BRASS 1, 2, 3, SYNTH LEAD 1, 2, 3, ROCK GUITAR, ELECTRIC PIANO S2... JAZZ ORGAN, STRINGS, TROMBONE, ALTO SAX, HARMONICA, FLUTE, JAZZ GUITAR, ELECTRIC PIANO S3... VIOLIN, STRINGS, TRUMPET, CLARINET, OBOE, PAN FLUTE, HAWAIIAN GUITAR, PIANO MEMORY...1~8 CHORUS, SUSTAIN	
	BASS	ORGAN, TUBA, ACOUSTIC, ELECTRIC, CHOPPER, SYNTH 1, 2, 3, SUSTAIN	
TECHNI-CHORD		○	
SOUND EDIT		SOUND EDIT, ⌐, ∫, ∫, RELEASE, VIBRATO (DEPTH, SPEED, DELAY), REPEAT DELAY (, SPEED), OCTAVE, POLY M...1~16, SOLO M...1~8	
BACK GROUND SOUND		○	THUNDER, BIRD, WIND CHIMES, RANDOM 1, 2, WIND, STREAM, WAVE, CHURCH BELL, CANCEL
RHYTHM		R1.. ROCK 1, 2, 3, POP 1, 2, 3, DISCO 1, 2 R2... ROCK 1, 2, 3, POP 1, 2, 3, DISCO 1, 2 R3... SHUFFLE, BALLAD, 8 BEAT, 16 BEAT, SWING ROCK, REGGAE, SALSA, BOSSA NOVA R4... MARCH/COUNTRY, WALTZ, JAZZ WALTZ, DIXIE, SWING, RHUMBA, TANGO, SAMBA	
	(CONTROLS)	TEMPO, START/STOP, SYNCHRO & BREAK	
FILL IN & INTRO		○	
ENDING		○	

Technics

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	SX-K500	SX-K700
KEYBOARD PERCUSSION	○, KEYBOARD	
MANUAL PERCUSSION	———	1~3
AUTO PLAY CHORD	ONE FINGER, FINGERED, MEMORY	
VARIATION	DRUMS, BASS & ACCOMP 1~4	
COMPOSER	———	RECORD (DRUMS, BASS, ACCOMP), CLEAR, STEP RECORD, TRIPLET, 1~4, ACCENT, TIE, CANCEL
TUNING	○	
TRANSPOSE	G ~ C ~ F♯	
FOOT SWITCH SELECTOR	GLIDE, ENDING, START/STOP, FILL IN, SUSTAIN (ALL OFF)	
BALANCE	BACK GROUND SOUND, DRUMS, BASS, ACCOMP, SOLO, POLY	
MODE SET	MODE SET, RECORD*, START/STOP, MIDI CLOCK, SONG SELECT, VELOCITY, PROGRAM CHANGE, OCTAVE (−2, −1, +1, +2), LOCAL CONTROL (SEQ TO EXT, MAN TO EXT, BOTH TO EXT), FSC ENABLE	
OTHERS	POWER SWITCH, MAIN VOLUME, MEMORY CARD SLOT, LINE OUT TERMINALS (Ⓡ/Ⓑ•Ⓛ, Ⓤ), PEDAL IN TERMINALS (EXP PEDAL, FOOT SW), MIDI TERMINALS (IN, OUT), HEADPHONE JACK, AC CORD INPUT, INITIAL KEY	
OUTPUT	10W × 2	
SPEAKERS	12 cm (4-23/32") × 1	9 cm (3-17/32") × 1
POWER REQUIREMENT	50 W	
	AC 120/220/240V 50/60 Hz,	AC 120V 60 Hz (NORTH AMERICA)
DIMENSIONS (W×H×D)	78.7 cm × 13.4 cm × 35.8 cm (30-31/32" × 5-9/32" × 14-3/32")	95.1 cm × 13.4 cm × 35.8 cm (37-7/16" × 5-9/32" × 14-3/32")
NET WEIGHT	10 kg (22.0 lbs.)	10.5 kg (23.1 lbs.)
ACCESSORIES	MUSIC RACK, DUST COVER, AC CORD	

- *Common RECORD button is used for these buttons.
- Specifications are subject to change without notice for further improvement.

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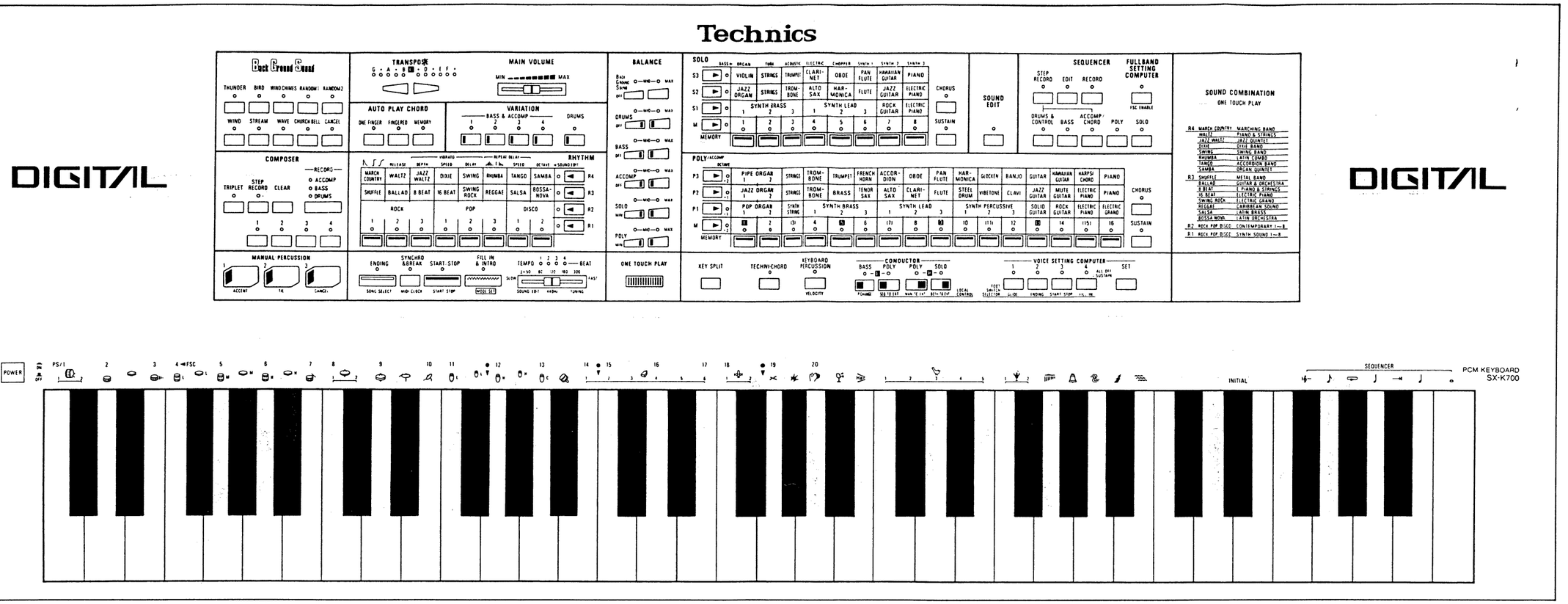
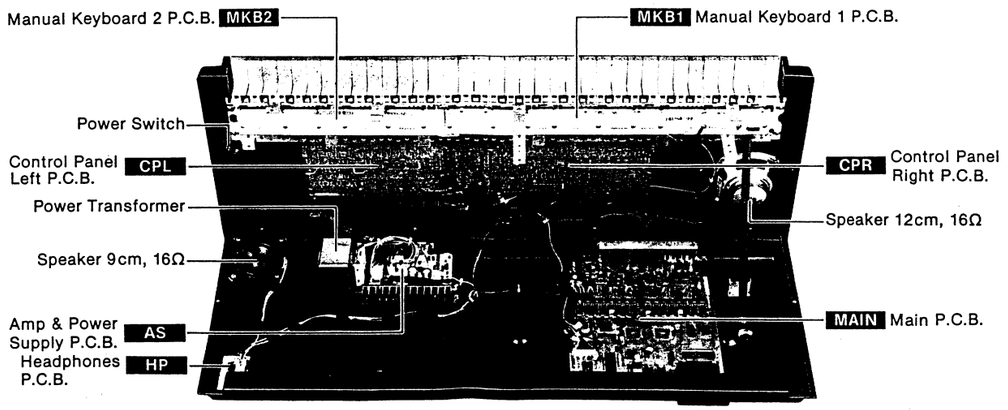
K700 ARRANGEMENT OF CONTROL PANEL

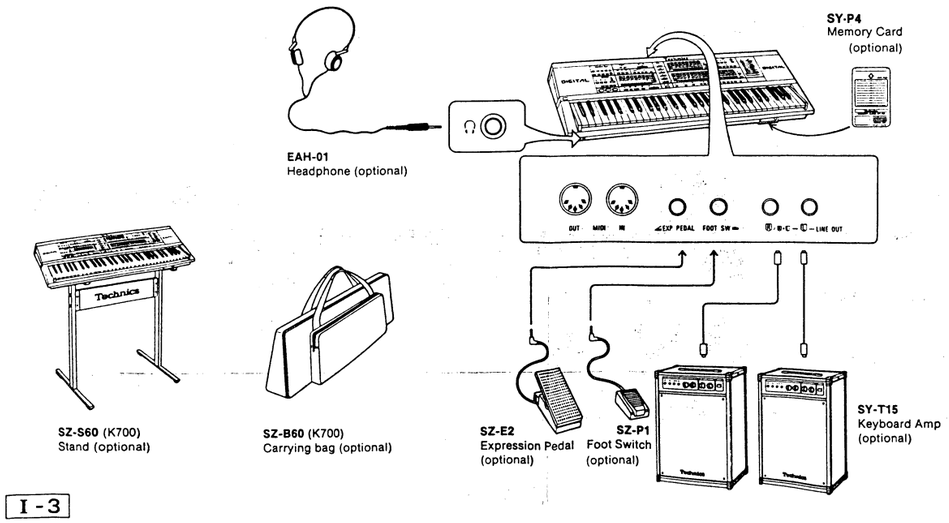


PARTS LOCATION

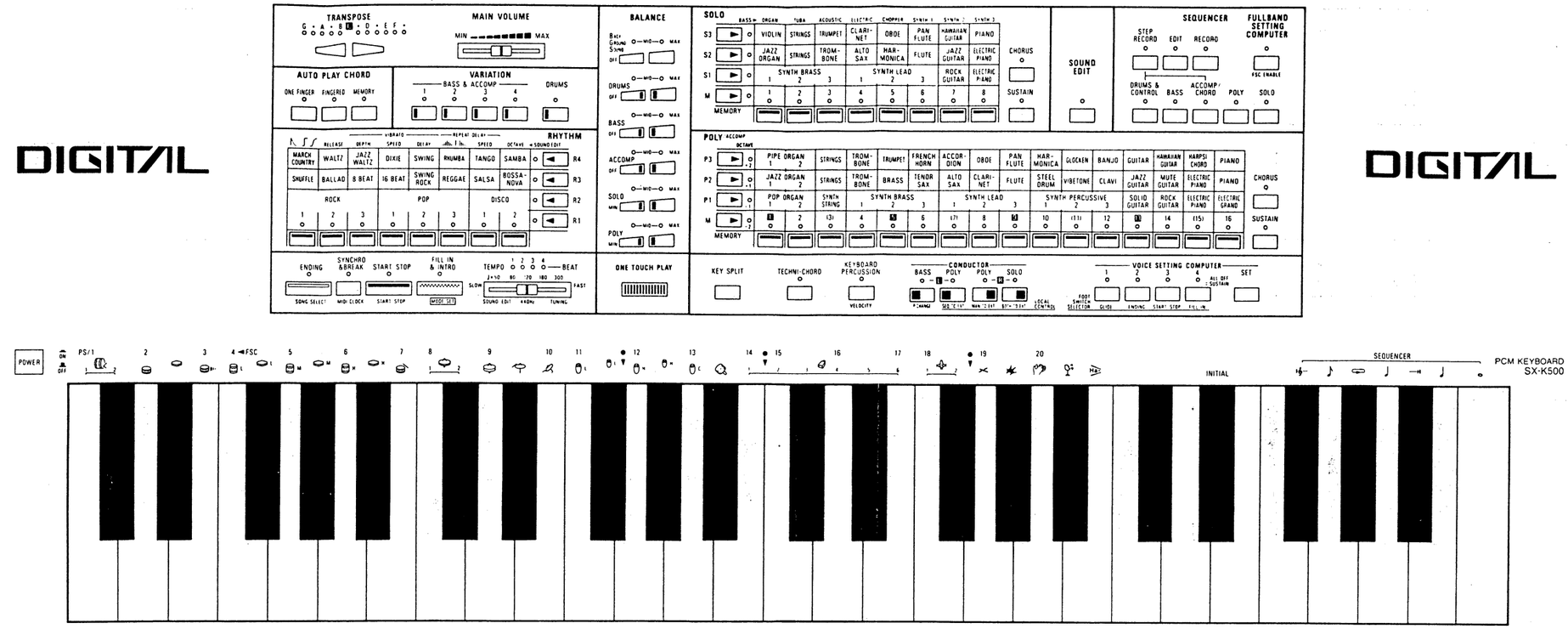


[Photo-1]

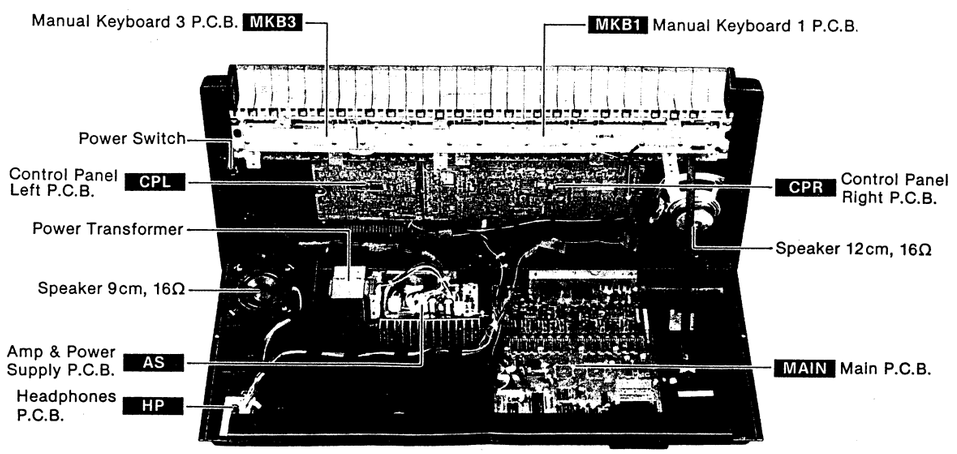
OPTIONS AND CONNECTIONS



ARRANGEMENT OF CONTROL PANEL

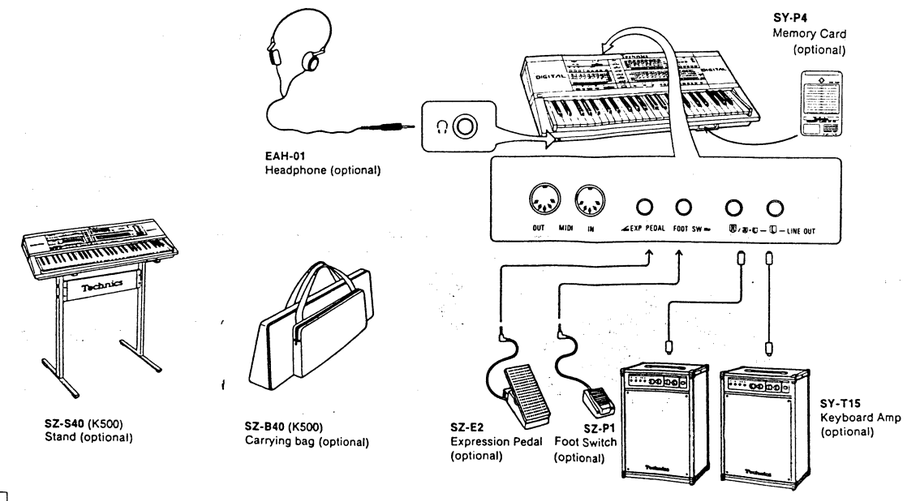


PARTS LOCATION

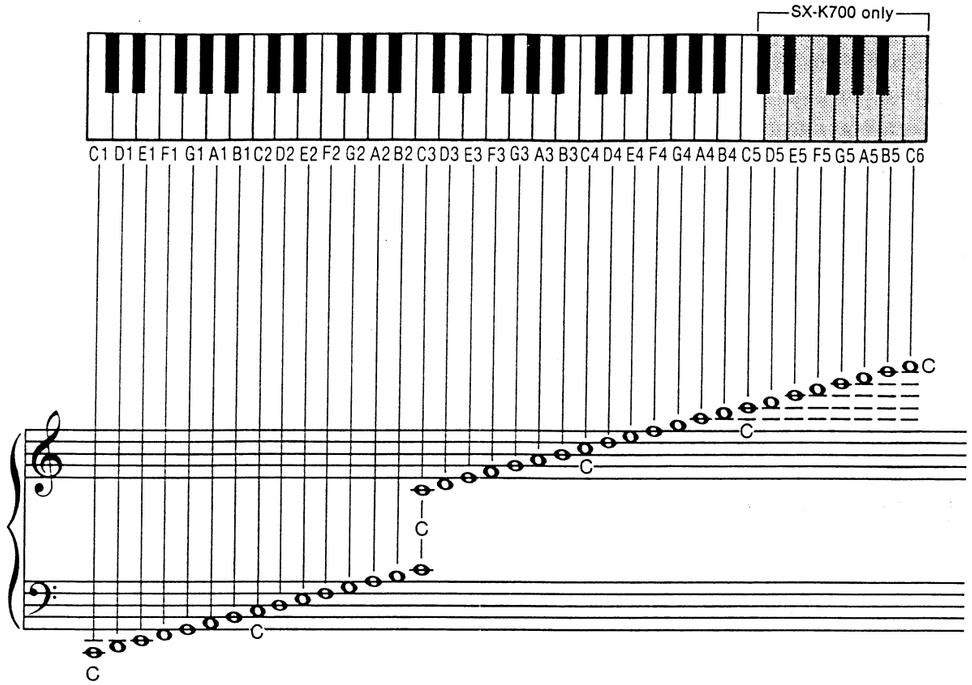


[Photo-2]

OPTIONS AND CONNECTIONS



KEYBOARD RANGES

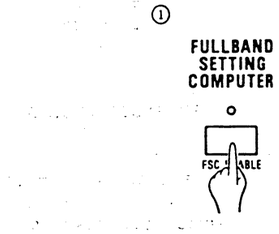


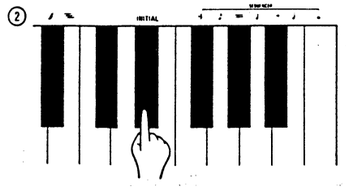
BASIC FUNCTIONS

★ For further details of operating method, refer to the instruction book.

■ **Standerd Settings 〈Initial Mode〉**

1. Press the FULLBAND SETTING COMPUTER button to turn it on.
2. Press the INITIAL key on the keyboard.
   - Various recording operations are possible with this keyboard. By performing this 〈initial mode〉 operation, the factory preset settings are designated. The contents stored in the COMPOSER, SEQUENCER and FULLBAND SETTING COMPUTER are left as they are.





■ **Conductor**

With this PCM keyboard you can select POLY, SOLO and BASS tone groups. The CONDUCTOR buttons allow you to assign specific tones from these groups to the entire keyboard or to the left or right part of a split keyboard.

The eight ways to assign tones to the keyboard are shown here.

(When the **AUTO PLAY CHORD** is off)

CONDUCTOR settings CONDUCTOR: BASS POLY (L) POLY SOLO (R); P CHANGE, SEQ TO EXT, MAN TO EXT, BOTH TO EXT, LOCAL CONTROL	Tonal keyboard G2 C3 G3 (K700 only)	Number of notes that sound simultaneously
(L) (R)	**POLY**	8 notes
(L) (R)	**SOLO**	2 notes
(L) (R) Press at the same time.	**POLY** + **SOLO**	**POLY**: 8 notes **SOLO**: 1 note
(L) (R) Press at the same time.	[L] **POLY** [R] **SOLO** Split point	[L] **POLY**: 8 notes [R] **SOLO**: 2 notes
(L) (R)	**BASS**	1 note
(L) (R) Press at the same time.	[L] **BASS** [R] **POLY** Split point	[L] **BASS**: 1 note [R] **POLY**: 8 notes
(L) (R) Press at the same time.	[L] **BASS** [R] **SOLO** Split point	[L] **BASS**: 1 note [R] **SOLO**: 2 notes
(L) (R) Press at the same time.	[L] **BASS** [R] **POLY** + **SOLO** Split point	[L] **BASS**: 1 note [R] **POLY**: 8 notes **SOLO**: 1 note

- Eight **POLY** notes can be produced at one time; however, when using the **AUTO PLAY CHORD** or **SEQUENCER** (**ACCOMP**) feature, only four **POLY** notes are produced at one time.
- Even if the keyboard is not split, if the **AUTO PLAY CHORD** is used, the keyboard splits automatically.
- When a mixed keyboard (**POLY** + **SOLO**) is selected, play the chord with your left hand and the melody with your right hand. If you remove your right hand from the keyboard, the **SOLO** sound will not shift to the left hand so that the melody can be successfully played. (When the interval between the chord and melody is less than one whole note, the sounds will shift to the left hand.)

PRECAUTIONS BEFORE SERVICING

■ Important safety notice:

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

■ Measuring of output waveforms

1. The waveform was measured by "National Digital Storage Oscilloscope VP-5730A". Therefore the waveforms of musical tone signals shown may somewhat change due to variation of timing of measure.
2. The voltage shown in the photo is 1/10 of the actual value. However, the actual voltage is 10 times of as shown in this photo.

■ Symptoms which appear to be signs of trouble

The following changes in performance may occur in the Technics keyboard but do not indicate trouble:

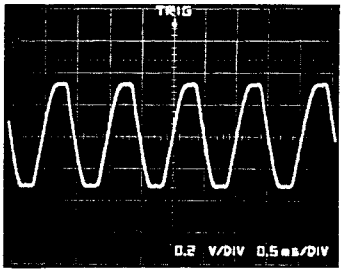
Phenomenon	Remedy
The buttons, keys, etc. malfunction.	•Press the **FULLBAND SETTING COMPUTER** button to turn it on, and then press the **INITIAL** key on the keyboard. •If the buttons and keys do not return to normal, turn off the **POWER** once, then on again. Turn on the **FULLBAND SETTING COMPUTER** button and press the **INITIAL** key.
No sound can be heard.	The **MAIN VOLUME** is at the minimum, or the **BALANCE** buttons are set to the off or minimum setting. Adjust the volume with the volume and **BALANCE** controls.
When many keys are pressed at the same time, not all of them sound.	•For the **POLY** part, up to 8 notes can sound at one time. When the **AUTO PLAY CHORD** or **SEQUENCER** is used, however, only 4 notes can sound for the **POLY** part. •If **SOLO** only is selected for the [R] part or for the entire keyboard, 2 notes can sound. But when **SOLO** and **POLY** are both selected for the same part of the keyboard, only one note sounds in the **SOLO** tone.
The rhythm does not start.	•When a **SEQUENCER** button(s) is on and a song without any rhythm has been stored, the rhythm does not start. •When the clock mode is set to **MIDI**, the rhythm does not start if no MIDI clock signal is received from another instrument. When using only the PCM Keyboard, return the clock mode to the internal clock, for example by turning off the **POWER** once.
The only rhythm produced is a hi-hat and bass drum sound.	This is the rhythm sound produced when the **KEYBOARD PERCUSSION** button is on. When the **KEYBOARD PERCUSSION** button is turned off, the rhythm returns to normal.
The rhythm you created with the **COMPOSER** can be heard only every other measure (K700 only).	Only one measure of rhythm has been stored. When a rhythm is created and stored in the **COMPOSER**, two successive measures of rhythm must be input for a continuous rhythm to sound.
When you attempt to edit a stored pattern in a **COMPOSER** button, it changes to another pattern entirely (K700 only).	For example, when you start to edit the **COMPOSER 1** pattern, press the **1** button BEFORE pressing the **RECORD** button on. If another **COMPOSER** button or other **RHYTHM** buttons are on when **RECORD** is pressed on, and if **COMPOSER 1** is then pressed, the contents of the **COMPOSER 1** button change to the pattern indicated before the **RECORD** button was pressed.
The **RECORD** and **SEQUENCER** indicators are flashing slowly, but storage is not successful.	•If any **SEQUENCER** indicator is lit, press the **START/STOP** button for automatic performance of the stored part. Another part can then be stored with the part already stored. •When storing two or more parts at the same time, turn on the respective **CONDUCTOR** button(s) before beginning to play. When storing the **DRUMS** part, turn on the **KEYBOARD PERCUSSION** button to use the percussive keyboard.

ADJUSTMENT PROCEDURE

ADJUSTMENT	MEASURING CONDITIONS	EQUIPMENT	ADJUSTMENT CIRCUIT BOARD	ADJ. POINT	CONNECT METER TO	METER READING
BBD bias	Any position	Oscilloscope and Oscillator	MAIN P.C.B.	VR1	IC50-⑦ pin	Photo-3
	1. Connect the oscilloscope to IC50-⑦ pin of MAIN P.C.B. 2. Input 1kHz sine wave to IC49-③ pin by oscillator through capacitor of less than 50V 1μF. Then adjust the output level of the oscillator until the sine wave on the oscilloscope is clipped. 3. Adjust VR1 so that the output waveforms on the oscilloscope are evenly clipped at top and bottom.					

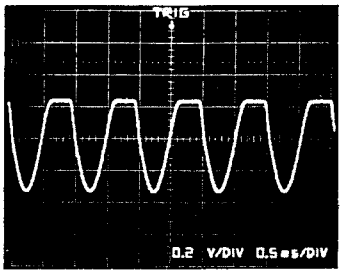
BBD bias adjustment

○: Good



[Photo-3]

×: Fault



[Photo-4]

OPTIONAL MEMORY CARD (SY-P4)

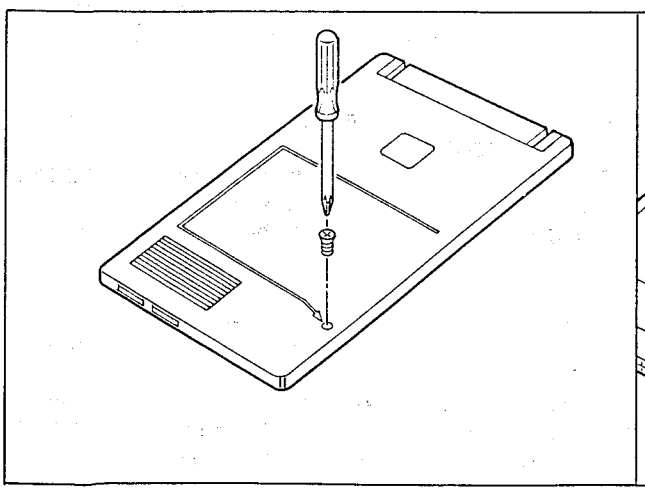
■ Precautions when using the memory card

1. The life of battery is about 3 years when used at normal temperatures.
2. The memory entries will be erased when the internal battery is used up, and new entries cannot be made.
3. When storing the memory entries, copy them before replacing the battery.

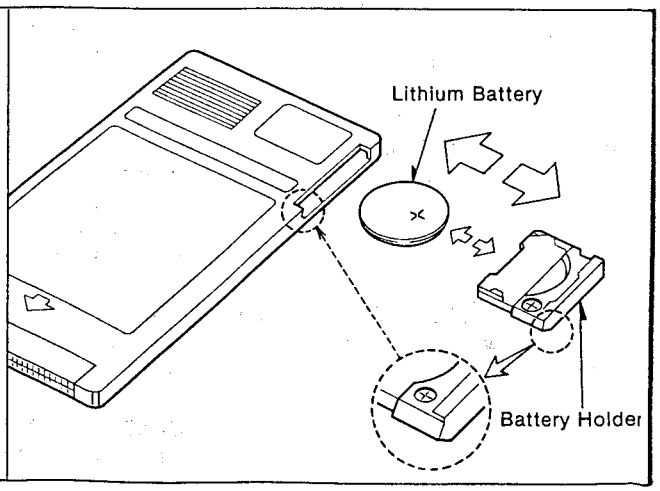
■ Battery replacing method

Caution: Before replacing the battery, be sure to explain the user that the memory entries will be erased. When storing the memory entries, copy them before replacing the battery.

1. Remove one screw on the back of memory card.
2. Pull out the battery holder as in Fig. 2.
3. When setting the battery, check the plus (+) mark of battery and the (+) mark of battery holder, and set it in correct polarity.
4. When setting the battery holder on the main body of memory card, be sure to set it in correct position.



[Fig. 1]



[Fig. 2]

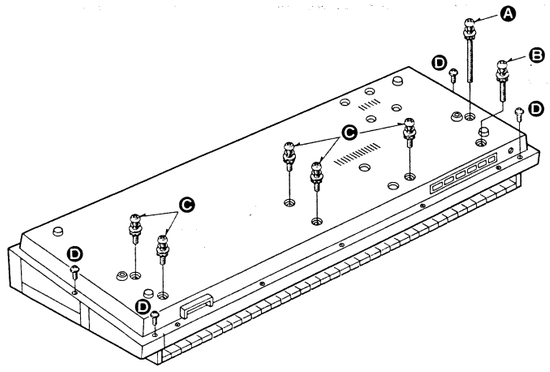
DISASSEMBLY PROCEDURE

SX-K700

1. How to remove the cabinet

①Turn the keyboard cabinet upside down as shown in Fig. 3, and remove the 11 screws Ⓐ, Ⓑ, Ⓒ and Ⓓ on the bottom board.
②Turn the keyboard cabinet bottomside down, and lift the upper cabinet.
Then the cabinet can be opend.

(Note)
When assemble the cabinet, make a mistake screws Ⓐ~Ⓓ.
So, should be mounting to right position.



[Fig. 3]

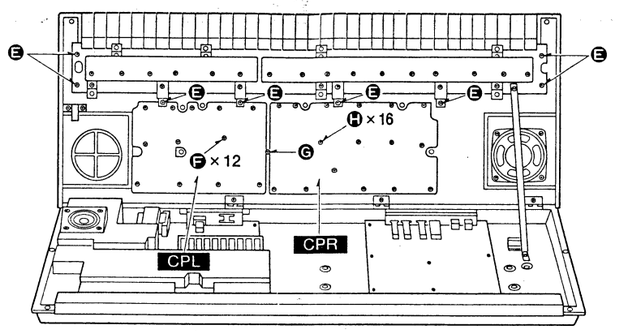
2. How to remove the keyboard assembly

①Open the cabinet according to step 1.
②Remove the 8 screws Ⓔ which fasten the keyboard chassis.
③Then the keyboard can be removed.

3. How to remove the control panel P.C.B. (CPL, CPR)

CPL Control panel left P.C.B.
①Pull out the main volume knob and tempo control knob.
②Remove the 12 screws Ⓕ and 1 screw Ⓖ which fasten the CPL circuit board.

CPR Control panel right P.C.B.
①Remove the 16 screws Ⓗ and 1 screw Ⓖ which fasten the CPR circuit board.



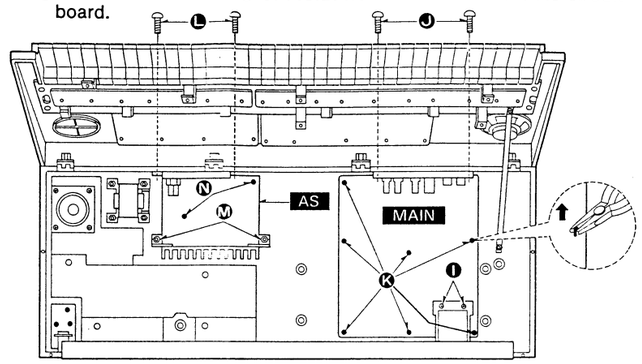
[Fig. 4]

4. How to remove the MAIN P.C.B.

①Pull out the connector of the MAIN circuit board.
②Remove the 2 screws Ⓘ and remove the card holder from MAIN P.C.B.
③Remove the 2 screws Ⓙ on the rear accessory panel.
④Release the 7 claws Ⓚ of P.C.B. holder to remove the MAIN circuit board.

5. How to remove the AS P.C.B.

①Pull out the connector of the AS circuit board.
②Remove the 2 screws Ⓛ on the rear accessory panel.
③Remove the 2 nuts Ⓜ which fasten the AS unit.
④Release the 2 claws Ⓝ of P.C.B. holder to remove the AS circuit board.



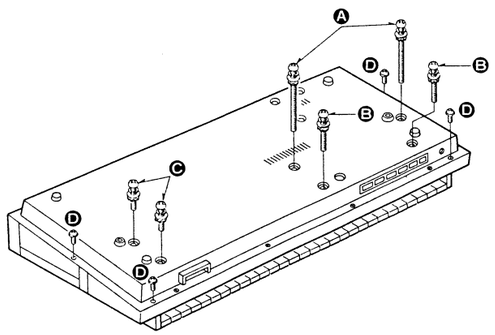
[Fig. 5]

SX-K500

1. How to remove the cabinet

①Turn the keyboard cabinet upside down as shown in Fig. 6, and remove the 10 screws Ⓐ, Ⓑ, Ⓒ and Ⓓ on the bottom board.
②Turn the keyboard cabinet bottomside down, and lift the upper cabinet.
Then the cabinet can be opend.

(Note)
When assemble the cabinet, make a mistake screws Ⓐ~Ⓓ.
So, should be mounting to right position.



[Fig. 6]

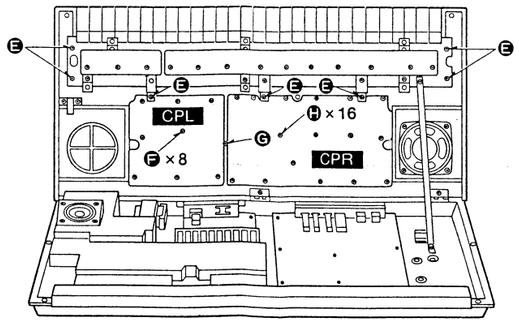
2. How to remove the keyboard assembly

①Open the cabinet according to step 1.
②Remove the 7 screws Ⓔ which fasten the keyboard chassis.
③Then the keyboard can be removed.

3. How to remove the control panel P.C.B. (CPL, CPR)

CPL Control panel left P.C.B.
①Pull out the main volume knob and tempo control knob.
②Remove the 8 screws Ⓕ and 1 screw Ⓖ which fasten the CPL circuit board.

CPR Control panel right P.C.B.
①Remove the 16 screws Ⓗ and 1 screw Ⓖ which fasten the CPR circuit board.



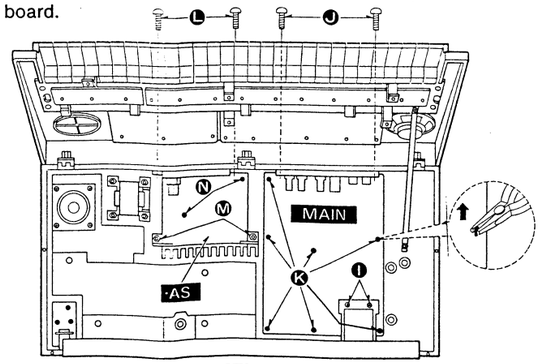
[Fig. 7]

4. How to remove the MAIN P.C.B.

①Pull out the connector of the MAIN circuit board.
②Remove the 2 screws Ⓘ and remove the card holder from MAIN P.C.B.
③Remove the 2 screws Ⓙ on the rear accessory panel.
④Release the 7 claws Ⓚ of P.C.B. holder to remove the MAIN circuit board.

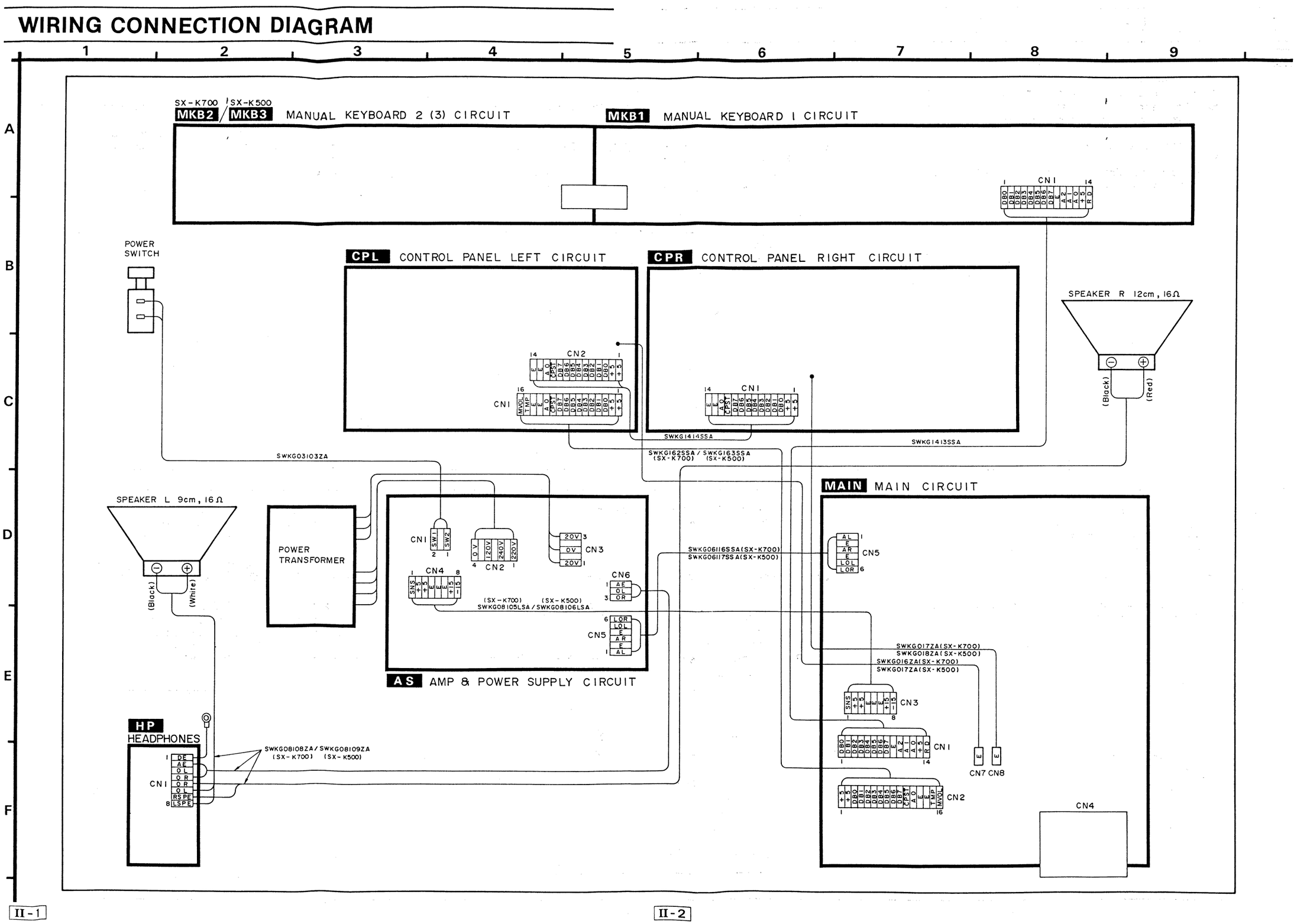
5. How to remove the AS P.C.B.

①Pull out the connector of the AS circuit board.
②Remove the 2 screws Ⓛ on the rear accessory panel.
③Remove the 2 nuts Ⓜ which fasten the AS unit.
④Release the 2 claws Ⓝ of P.C.B. holder to remove the AS circuit board.



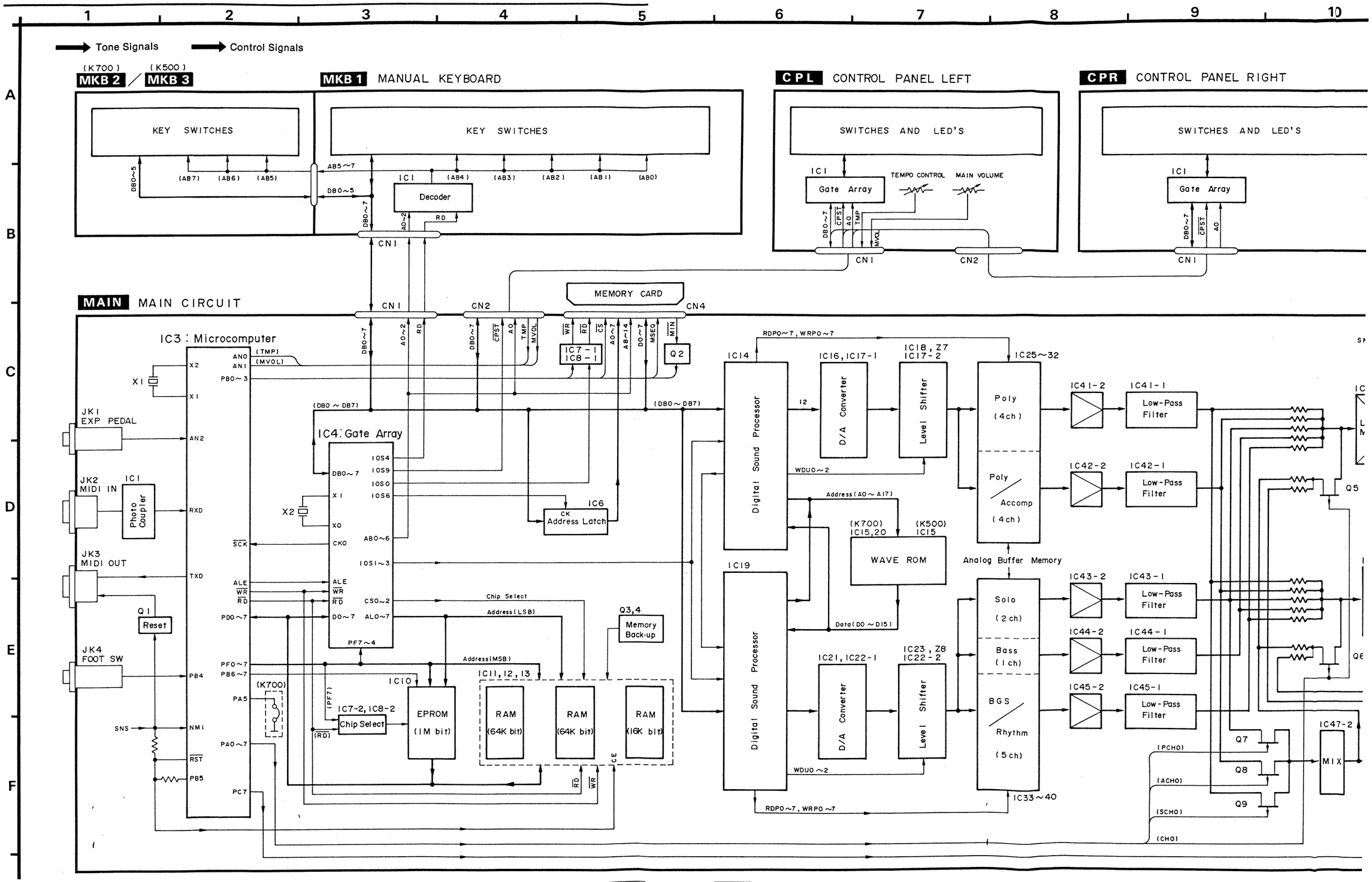
[Fig. 8]

WIRING CONNECTION DIAGRAM


SX-K700 / SX-K500
MKB2 / MKB3 MANUAL KEYBOARD 2 (3) CIRCUIT
MKB1 MANUAL KEYBOARD 1 CIRCUIT
CN1
DB0 DB1 DB2 DB3 DB4 DB5 DB6 DB7 E A2 A1 A0 +5 RD
POWER SWITCH
CPL CONTROL PANEL LEFT CIRCUIT
CPR CONTROL PANEL RIGHT CIRCUIT
CN2
E E A0 CPST DB7 DB6 DB5 DB4 DB3 DB2 DB1 DB0 +5 +5
CN1
MVOL TMP E E A0 CPST DB7 DB6 DB5 DB4 DB3 DB2 DB1 DB0 +5 +5
SPEAKER R 12cm, 16Ω
(Black)
(Red)
SWKG1414SSA
SWKG1413SSA
SWKG0310 3ZA
SWKG1625SSA / SWKG1635SSA
(SX-K700) (SX-K500)
MAIN MAIN CIRCUIT
SPEAKER L 9cm, 16Ω
(Black)
(White)
POWER TRANSFORMER
CN1 SW1 SW2
CN2 0V 120V 240V 220V
CN3 20V 0V 20V
CN4 SNS +5 +5 E E E +15 −15
CN6 AE OL OR
CN5 LOR LOL E AR E AL
(SX-K700) (SX-K500)
SWKG0811 0SSA / SWKG0811 1SSA
AS AMP & POWER SUPPLY CIRCUIT
SWKG0611 6SSA(SX-K700)
SWKG0611 7SSA(SX-K500)
CN5 AL E AR E LOL LOR
SWKG0617ZA(SX-K700)
SWKG0618ZA(SX-K500)
SWKG0616ZA(SX-K700)
SWKG0617ZA(SX-K500)
CN3 SNS +5 +5 E E E +5 −15
CN1 DB0 DB1 DB2 DB3 DB4 DB5 DB6 DB7 E A2 A1 A0 +5 RD
CN7 CN8 E E
CN2 +5 +5 DB0 DB1 DB2 DB3 DB4 DB5 DB6 DB7 CPST A0 E E TMP MVOL
CN4
HP HEADPHONES
CN1 DE AE OL OR OR OL RSPE LSPE
SWKG0810 8ZA / SWKG0810 9ZA
(SX-K700) (SX-K500)

II-1 II-2

BLOCK DIAGRAM



CPL CONTROL PANEL LEFT

SWITCHES AND LED'S

IC1 Gate Array

TEMPO CONTROL

MAIN VOLUME

DB0~7 CPST AO TMP MVOL

CN1 CN2

CPR CONTROL PANEL RIGHT

SWITCHES AND LED'S

IC1 Gate Array

DB0~7 CPST AO

CN1

AS AMP & POWER SUPPLY

Q1~4 Reset Circuit / Muting Circuit

IC1, Q5 +5V Switching Regulator

IC2 +15 Regulator

IC3 -15 Regulator

SNS +5 +15 -15 E

CN4

D1,2,D5~8 Rectifier

Primary Circuit

SW1 SW2 CN1

Power SW

AC1 AC2

AC IN

CN2 CN3

POWER TRANSFORMER

CN3 SNS +5 +15 -15 E

MEMORY CARD

CN4

RD CS AO~7 A8~14 D0~7 MSEQ MIN

Q2

(DB0~DB7)

IC14 Digital Sound Processor

12

IC16, IC17-1 D/A Converter

IC18, Z7 IC17-2 Level Shifter

RDP0~7, WRP0~7

IC25~32 Poly (4ch) / Accomp (4ch)

WDU0~2

Address (A0~A17)

IC6 Latch

(K700) IC15, 20 (K500) IC15 WAVE ROM

IC19 Digital Sound Processor

Analog Buffer Memory

Solo (2ch) / Bass (1ch) / BGS / Rhythm (5ch)

IC33~40

Data (D0~D15)

IC21, IC22-1 D/A Converter

IC23, Z8 IC22-2 Level Shifter

WDU0~2

RDP0~7, WRP0~7

Q3,4 Memory Back-up

RAM (16K bit)

M bit)

CE WR

IC41-2 IC41-1 Low-Pass Filter

IC42-2 IC42-1 Low-Pass Filter

IC43-2 IC43-1 Low-Pass Filter

IC44-2 IC44-1 Low-Pass Filter

IC45-2 IC45-1 Low-Pass Filter

IC46-2 L ch MIX

IC46-1 R ch MIX

Q5 Q6

IC52 Dynamic Noise Reduction

IC53 VCA

IC54-1 I/V Converter

IC54-2 I/V Converter

IC47-1 Integrator

IC4-1 (L ch) Power Amplifier

IC4-2 (R ch) Power Amplifier

AL AR LOR LOL

CN5

OL OR

CN6

CN1

HP HEADPHONES

JK1 Phones

SPEAKER L 9cm, 16Ω

SPEAKER R 12cm, 16Ω

JK5 LINE OUT L

JK6 LINE OUT R/R+L

Q7 Q8 Q9

(PCHO) (ACHO) (SCHO) (CHO)

IC47-2 MIX

IC49 BBD

IC50-2 Low-Pass Filter

IC50-1 Phase Inverter

IC48 Clock Generator

IC51-1, IC51-2 LFO

MAIN MAIN CIRCUIT BOARD

• P.C.B. comparison chart

Model	P.C.B. No.	IC20	J (Jumper Wire)
SX-K700	SXPG138311	○	○
SX-K500	SXPG138321	×	×

1 2 3 4 5 6 7 8 9 10

A B C D E F

Circuit view on top of P.C.B.

❶ Tempo Control

• Tempo Control
♩=50 ..... 0V
♩=300 ..... +5V

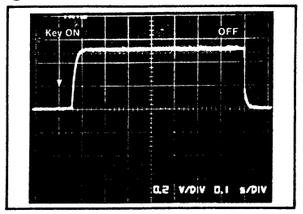
❷ Main Vol. Control

• Main Volume
MAX 0V
MIN ..... +5V

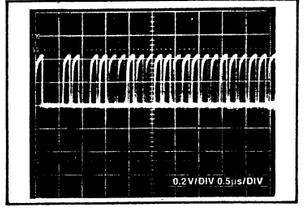
❸ EXP Pedal Control

• EXP Pedal
MAX 0V
MIN ..... +5V

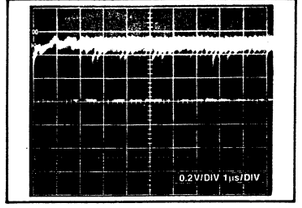
❹



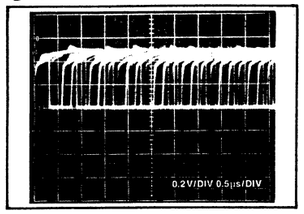
❺ ALE



❻ $\overline{WR}$



❼ $\overline{RD}$



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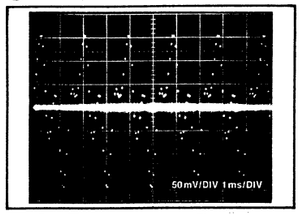
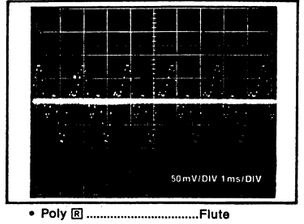


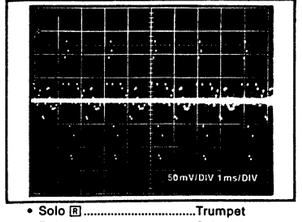
• Poly R ..... Flute
• Balance ..... Poly: Max.
• Keyboard ..... C4 Key

❾

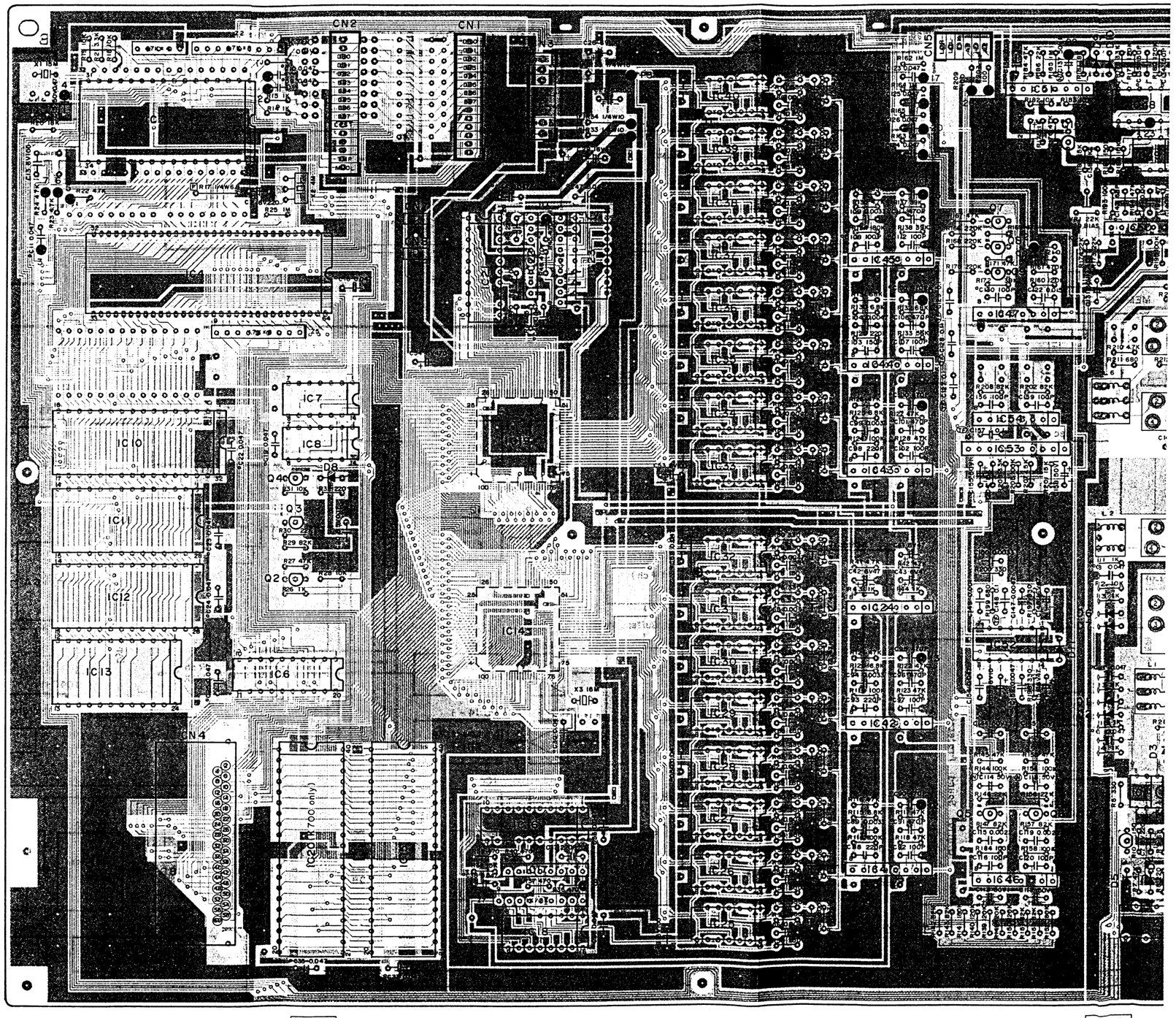


• Poly R ..... Flute
• Balance ..... Poly: Max.
• Keyboard ..... C4 Key

❿

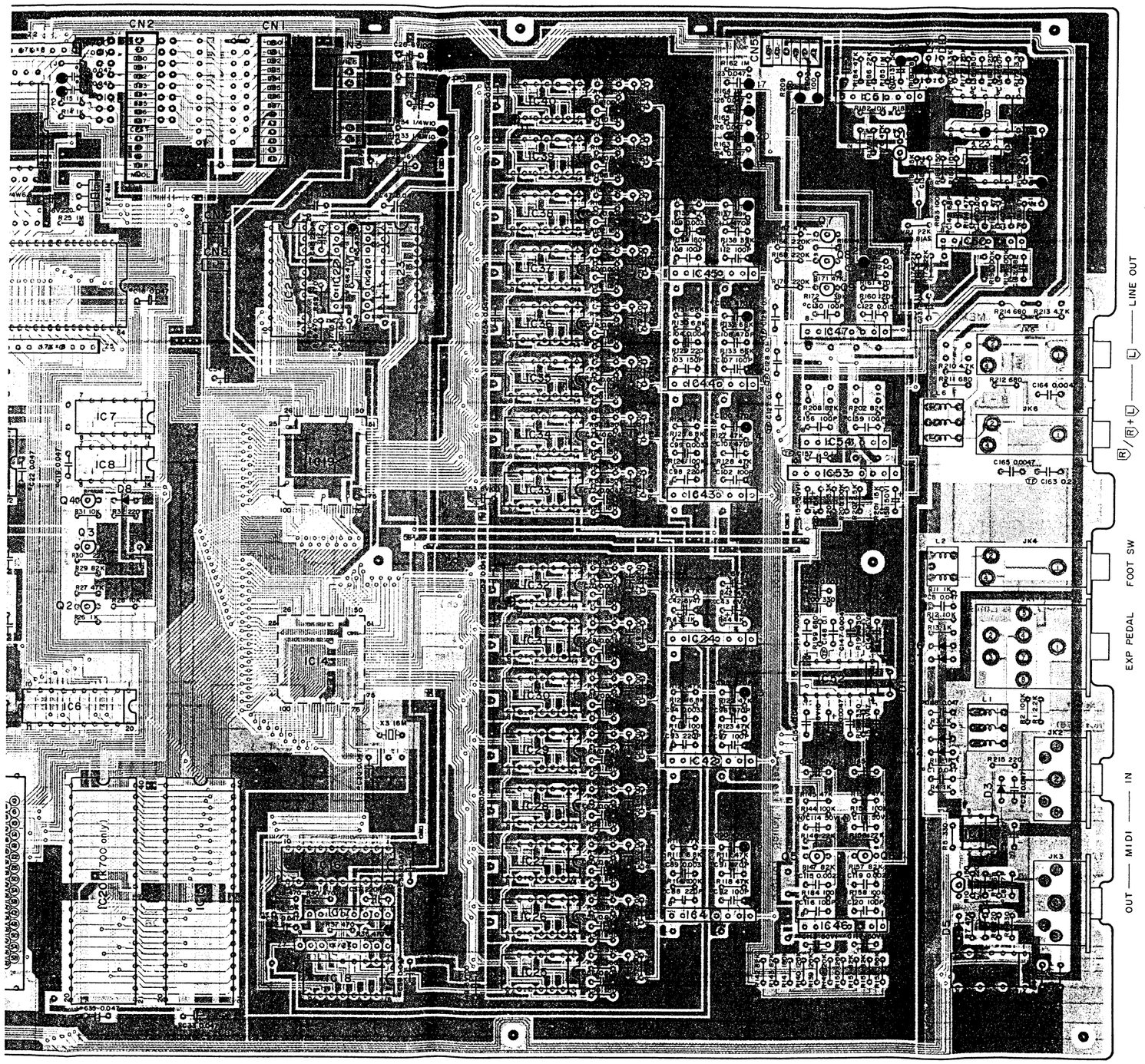


• Solo R ..... Trumpet
• Balance ..... Solo: Max.
• Keyboard ..... C4 Key



• P.C.B. comparison chart

Model	P.C.B. No.	IC20	J (Jumper Wire)
SX-K700	SXPG138311	○	○
SX-K500	SXPG138321	×	×



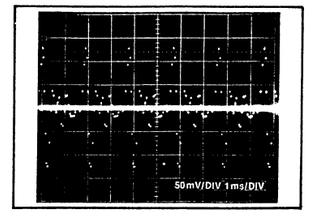
II-7

II-8

• SX-K700 **SXPG138311**

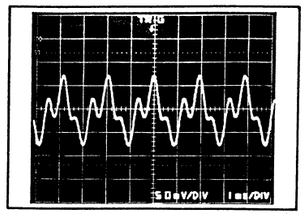
• SX-K500 **SXPG138321**

⓫



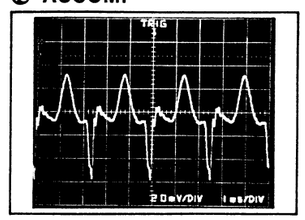
• Solo R ..... Trumpet
• Balance ..... Solo: Max.
• Keyboard ..... C4 Key

⓬ POLY



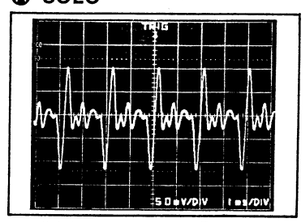
• Poly R ..... Flute
• Balance ..... Poly: Max.
• Keyboard ..... C4 Key

⓭ ACCOMP



• Auto Play Chord ..... Fingered
• Balance ..... Accomp: Max.
• Key split C3
• Keyboard ..... G2 Key

⓮ SOLO



• Solo R ..... Trumpet
• Balance ..... Solo: Max.
• Keyboard C4

NOTES:

• IC'S

IC1:	SVIGPC900
IC2:	SVIGM74LS05
IC3:	SVIG7810H
IC4:	SVIGM603A114
IC6:	SVIGTC40H374
IC7:	SVIGTC40H004
IC8:	SVIGTC40H000
IC10:	SVIG10K700A0
IC11, 12:	SVIGD446415L
IC13:	SVIGD446C25
IC14, 19:	MN6635
IC15:	SVIGM304C206
IC16, 21:	SVIGBA9221
IC17, 22:	SVIGM5238L
IC18, 23:	MN74HC4051
IC20:	SVIGU302C270 (SX-K700 only)
IC24, 41~47, 50, 51, 54:	SVIGM5218L
IC25~35:	SVIGUPD4066B
IC36~40:	SVIG74HC4066
IC48:	SVIGMSM4011
IC49:	MN3009
IC52:	SVIGLM1894N
IC53:	SVIGM5241L

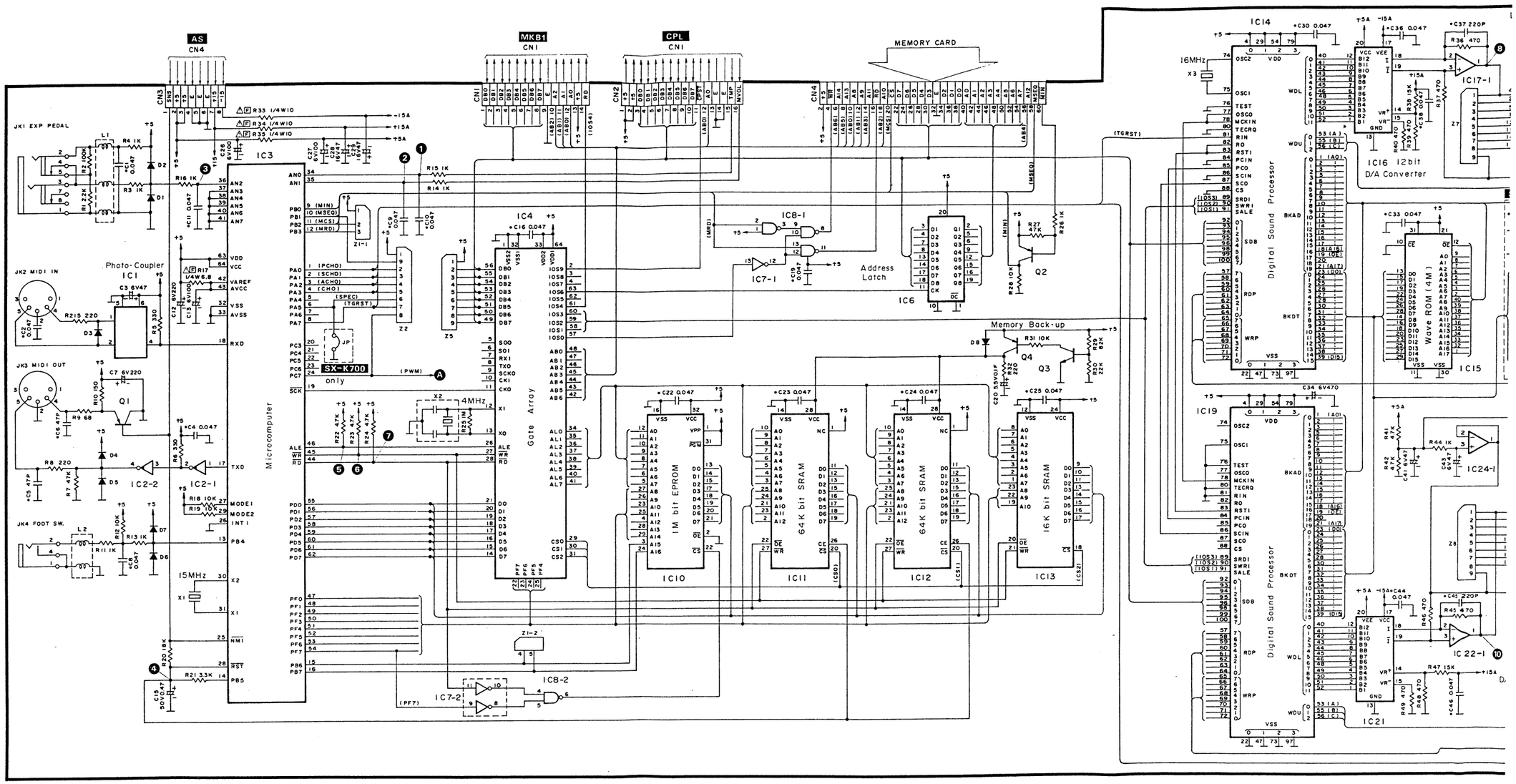
• TRANSISTORS

Q1, 2, 4:	2SA1015-GR
Q3, 10:	2SC2320LFG
Q5~9:	2SJ40CD

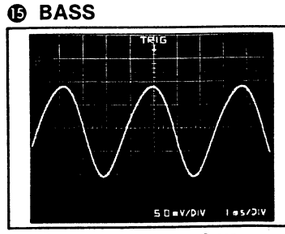
• DIODES

D1~11:	MN165TA5

MAIN CIRCUIT DIAGRAM

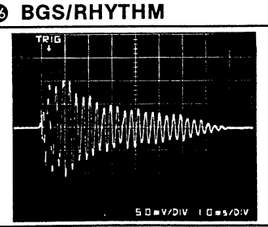


⑮ BASS



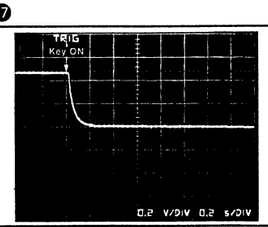
- Bass ..... Organ
- Balance ..... Bass: Max.
- Keyboard ..... C4 Key

⑯ BGS/RHYTHM



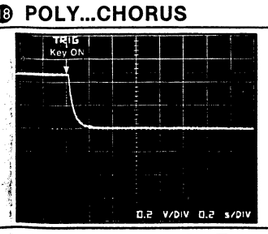
- Keyboard Percussion ..... ON
- Balance ..... Drums: Max.
- Keyboard ..... G2 (Hi-Conga)

⑰



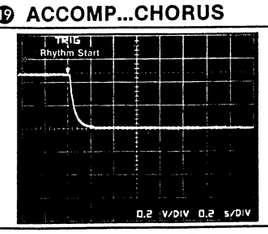
- Key ON or Rhythm Start

⑱ POLY...CHORUS



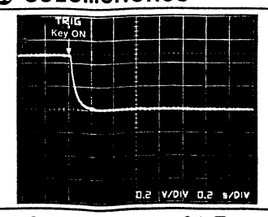
- Conductor ..... Poly R
- Chorus ..... ON
- Keyboard ..... ON

⑲ ACCOMP...CHORUS



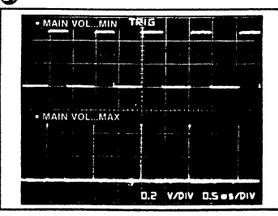
- Auto Play Chord ..... Fingered
- Rhythm Start ..... 8 beat
- Variation 2
- Keyboard ..... G2 Key

⑳ SOLO...CHORUS



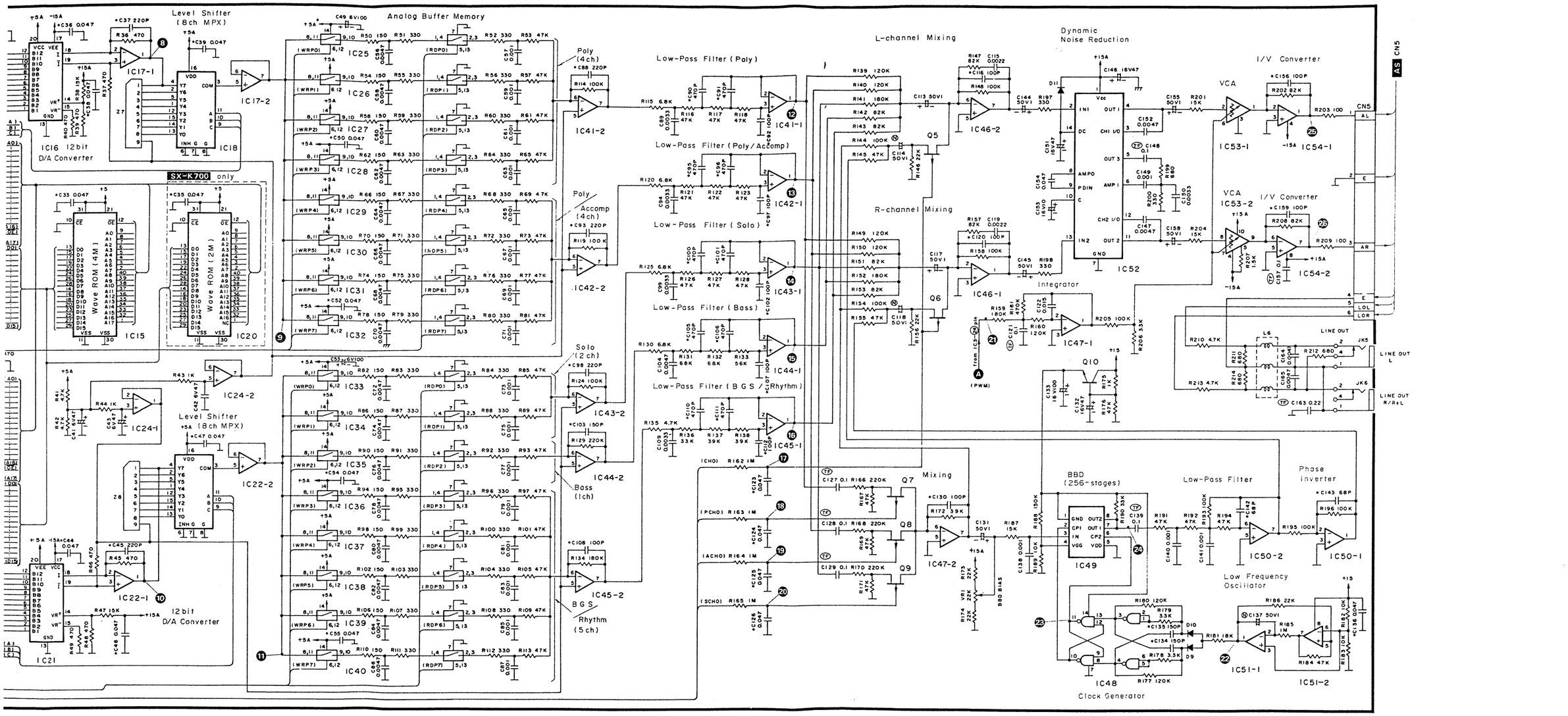
- Conductor ..... Solo R
- Chorus ..... ON
- Keyboard ..... ON

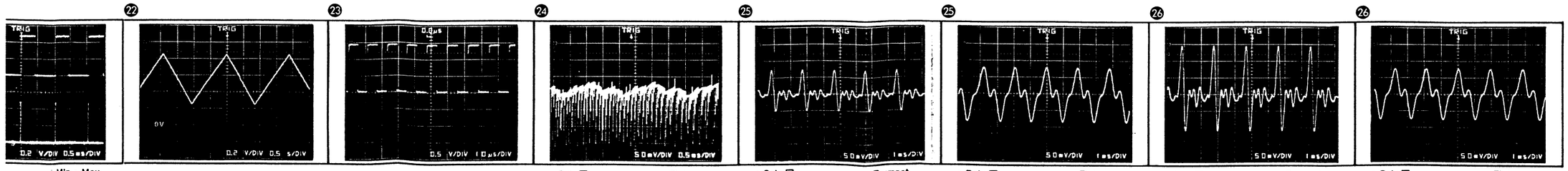
㉑



- Main Vol ..... Min.~Max.

㉒





.....Min.~Max.

- Poly R .....Flute
- Balance.....Max.
- Chorus .....ON
- Keyboard .....C4 Key

- Solo R .....Trumpet
- Main Vol., Balance.....Max.
- Keyboard .....C4 Key

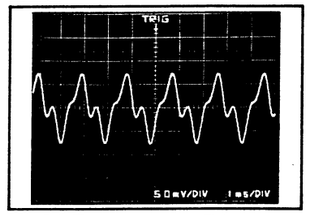
- Poly R .....Flute
- Main Vol., Balance.....Max.
- Keyboard .....C4 Key

- Solo R .....Trumpet
- Main Vol., Balance.....Max.
- Keyboard .....C4 Key

- Poly R .....Flute
- Main Vol., Balance.....Max.
- Keyboard .....C4 Key

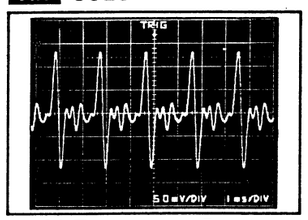
AMP & POWER SUPPLY, HEADPHONES CIRCUIT DIAGRAM

AR POLY



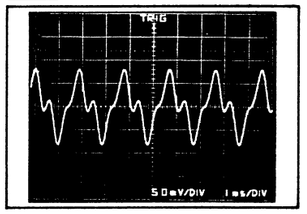
- Poly Ⓡ .....Flute
- Main Volume.....Max.
- Balance.....Poly: Max.
- Keyboard .....C4 Key

AR SOLO



- Solo Ⓡ .....Trumpet
- Main Volume.....Max.
- Balance.....Solo: Max.
- Keyboard .....C4 Key

AL POLY



- Poly Ⓡ .....Flute
- Main Volume.....Max.
- Balance.....Poly: Max.
- Keyboard .....C4 Key

AS AMP & POWER SUPPLY CIRCUIT

Power SW. Power Transformer Primary Circuit SW1 F2 T630mA 250V F3 T630mA 250V F1 T1.25A 250V 220V (BRN) 240V (RED) 120V (ORG) 0V (BLU) CN2 CN1 SW2 SW1 JK1 AC1 AC2 L1 L2 C1 4700P C2 0.1 250V AC cord

* PRODUCTS FOR (M) & (MC) Primary Circuit F1 1.6A 125V

CN3 20V (BLU) 0V (BLK) 20V (BLU) C3 0.1 250V

Rectifier D1 D2 R1 10K R2 10K R3 10K

D3 C7 16V10 R4 1K R5 100 R6 4.7K R7 4.7K R8 10K Q1 Q2 Q3 Q4 D4 R9 4.7K R10 1.5M R11 1M R12 470K R13 220K R14 22K C6 6V100 C8 50V2.2 Reset Circuit Muting Circuit

Rectifier D5 D6 D7 D8 R15 1W2 R16 1W0.47 Q5 L3 R17 100 R18 1W 470 D9 D10 IC1 C9 35V10 C10 0.001 C12 6V1000 C11 0.047 R19 3.3K R20 1K +5V Switching Regulator

IC2 +15V Regulator C4 35V2200 C13 35V10

IC3 -15V Regulator C5 35V2200 C14 35V10

MAIN CN3 SNS CN4 SNS +5 +5 E E E +15 -15

IC4-2 Power Amplifier C20 0.1 R29 10K C21 100P R30 2.2K R31 2.2K R36 47K R37 2.2K C22 6V100 C24 25V47 R38 1.5K R39 1.5K C25 0.1 R40 1/4W 4.7 C23 35V10 R33 1K R34 1K R35 270K R32 1K IC4-1 Power Amplifier C15 50V1 R21 10K C16 100P R22 2.2K R23 2.2K C17 6V100 C18 25V47 R24 47K R26 1.5K R27 1.5K C19 0.1 R28 1/4W 4.7

MAIN CN5 AL E AR E LOL LOR

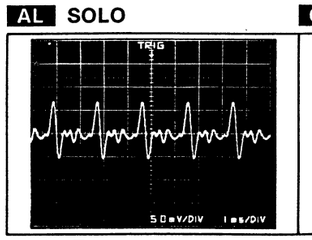
CN6 AE OL OR

HP HEADPHONES CIRCUIT

DE AE OL OR OR OL RSPE LSPE R1 1/2W470 R2 1/2W 470 L1 C1 0.047 C2 0.047 C3 0.1 JK1 HEADPHONES

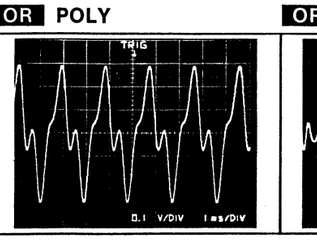
Speaker L 9cm, 16Ω Speaker R 12cm, 16Ω

AL SOLO



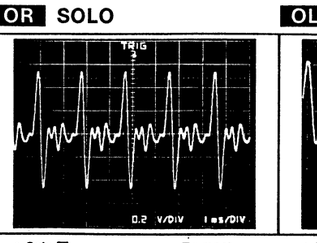
- Solo Ⓡ .....Trumpet
- Main Volume.....Max.
- Balance.....Solo: Max.
- Keyboard .....C4 Key

OR POLY



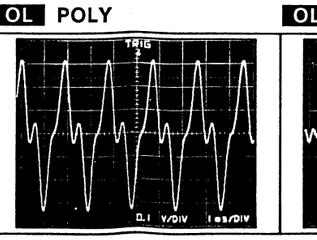
- Poly Ⓡ .....Flute
- Main Volume.....Max.
- Balance.....Poly: Max.
- Keyboard .....C4 Key

OR SOLO



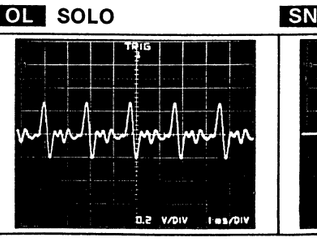
- Solo Ⓡ .....Trumpet
- Main Volume.....Max.
- Balance.....Solo: Max.
- Keyboard .....C4 Key

OL POLY



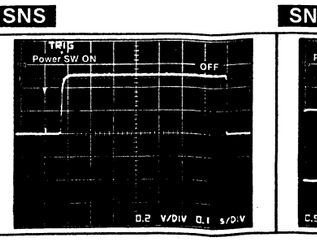
- Poly Ⓡ .....Flute
- Main Volume.....Max.
- Balance.....Poly: Max.
- Keyboard .....C4 Key

OL SOLO



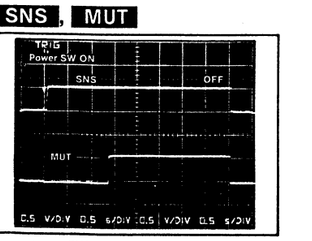
- Solo Ⓡ .....Trumpet
- Main Volume.....Max.
- Balance.....Solo: Max.
- Keyboard .....C4 Key

SNS



- Power SW.....ON-OFF

SNS, MUT

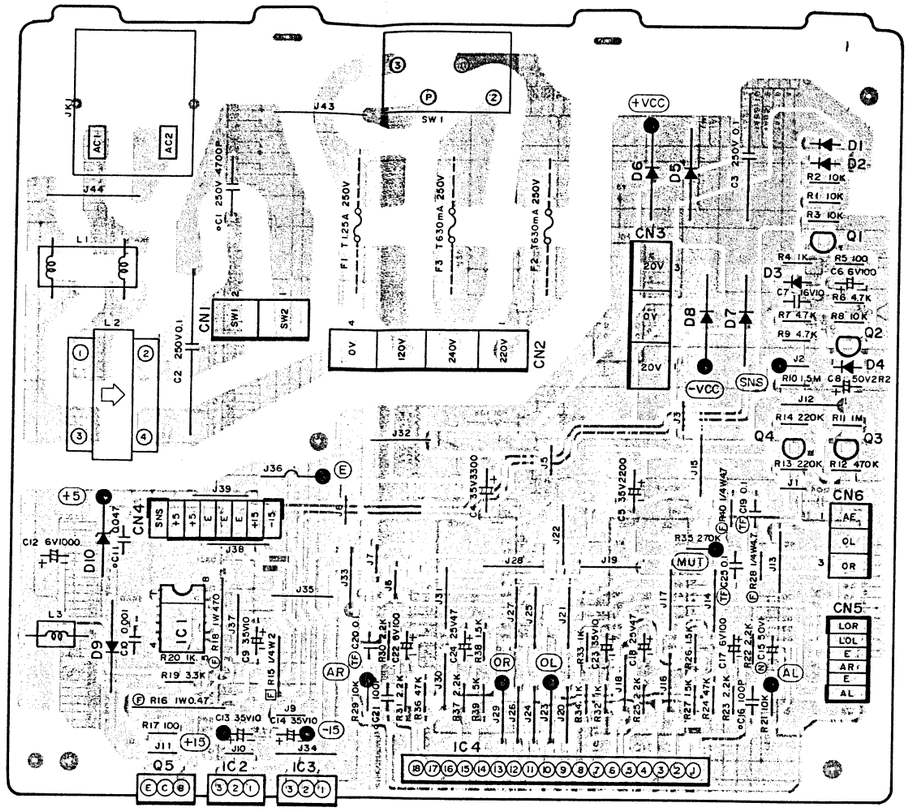


- Power SW.....ON-OFF

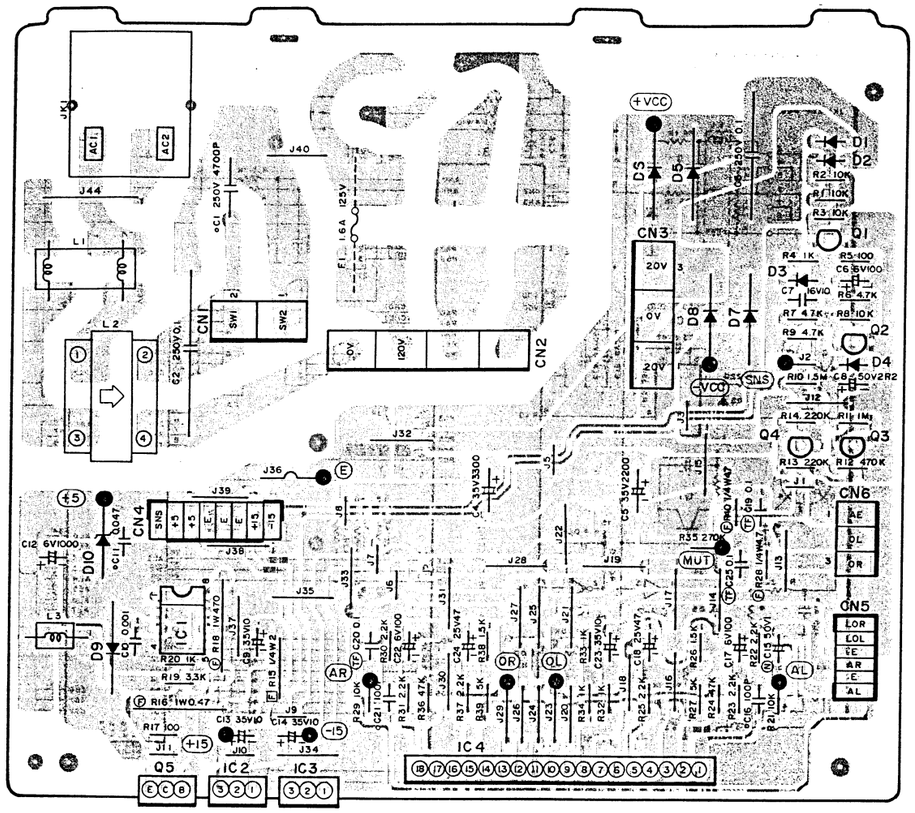
AS AMP & POWER SUPPLY CIRCUIT BOARD

• Products for (XL) and (XR) **SXPG138741**

• Other Areas Except (XL), (XR), (M), (MC) **SXPG138711**



• Products for (M) and (MC) **SXPG138721**



NOTES:

• IC'S
- IC1: SVIGM5291P
- IC2: SVIGM5F7815
- IC3: SVIGM5F7915
- IC4: SVIGS4132M2M

• TRANSISTORS
- Q1~3: 2SC2320LFG
- Q4: 2SA1015-GR
- Q5: 2SB953AQP

• DIODES
- D1, 2: SVDGERA1502Y
- D3, 4: MA165TA5
- D5~8: SVDS2V20
- D9: SVDGRK14
- D10: MA2062LF

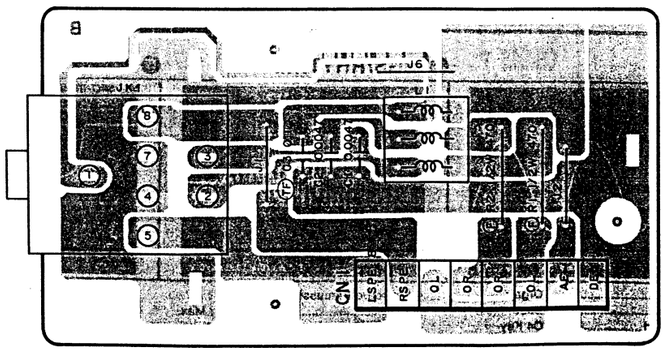
• FUSES
- F1: XBA2C12TB0
- F2, 3: XBA2C063TB0

NOTES:

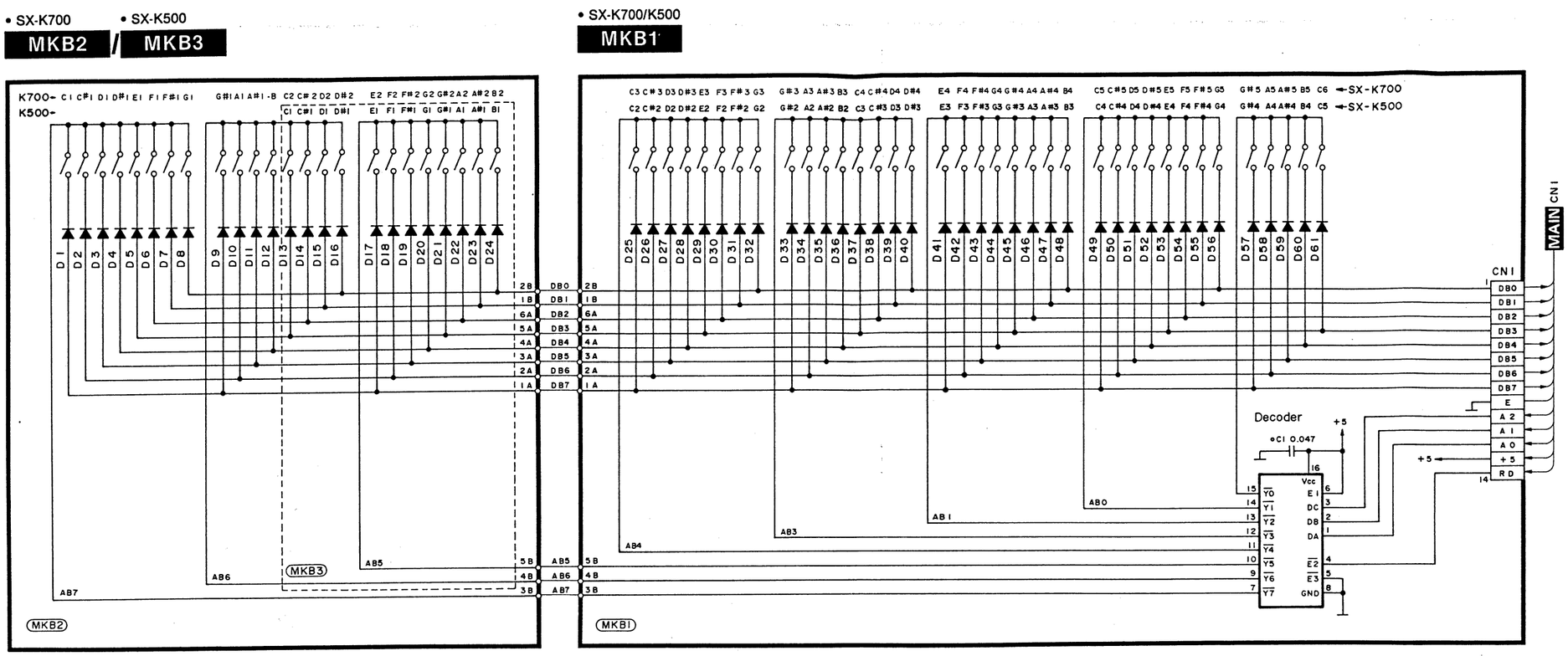
• FUSES
- F1: XBA1C16NU100

HP HEADPHONES CIRCUIT BOARD

SXPG138811



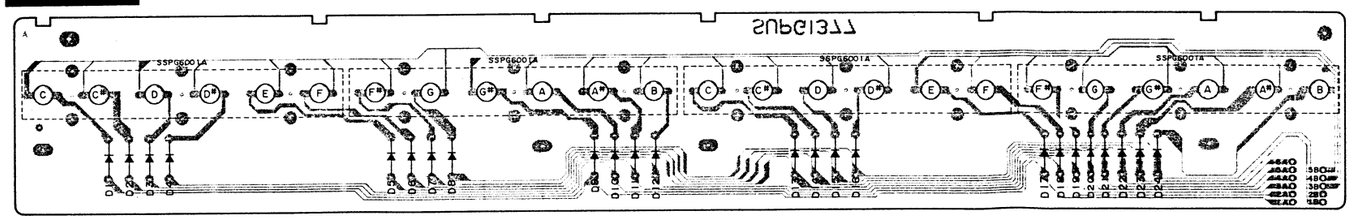
MKB MANUAL KEYBOARD CIRCUIT DIAGRAM AND CIRCUIT BOARD


• SX-K700
MKB2
• SX-K500
MKB3
• SX-K700/K500
MKB1
K700→ C1 C#1 D1 D#1 E1 F1 F#1 G1 G#1 A1 A#1 B1 C2 C#2 D2 D#2 E2 F2 F#2 G2 G#2 A2 A#2 B2
K500→ C1 C#1 D1 D#1 E1 F1 F#1 G1 G#1 A1 A#1 B1
C3 C#3 D3 D#3 E3 F3 F#3 G3 G#3 A3 A#3 B3 C4 C#4 D4 D#4 E4 F4 F#4 G4 G#4 A4 A#4 B4 C5 C#5 D5 D#5 E5 F5 F#5 G5 G#5 A5 A#5 B5 C6 →SX-K700
C2 C#2 D2 D#2 E2 F2 F#2 G2 G#2 A2 A#2 B2 C3 C#3 D3 D#3 E3 F3 F#3 G3 G#3 A3 A#3 B3 C4 C#4 D4 D#4 E4 F4 F#4 G4 G#4 A4 A#4 B4 C5 →SX-K500
D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D12 D13 D14 D15 D16 D17 D18 D19 D20 D21 D22 D23 D24
D25 D26 D27 D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43 D44 D45 D46 D47 D48 D49 D50 D51 D52 D53 D54 D55 D56 D57 D58 D59 D60 D61
2B DB0 2B
1B DB1 1B
6A DB2 6A
5A DB3 5A
4A DB4 4A
3A DB5 3A
2A DB6 2A
1A DB7 1A
5B AB5 5B
4B AB6 4B
3B AB7 3B
AB7
AB6
AB5
MKB3
MKB2
AB4
AB3
AB1
AB0
MKB1
CN1
MAIN CN1
DB0 DB1 DB2 DB3 DB4 DB5 DB6 DB7 E A2 A1 A0 +5 RD
Decoder
•C1 0.047
+5
Vcc GND
Y0 Y1 Y2 Y3 Y4 Y5 Y6 Y7
E1 DC DB DA E2 E3

NOTES:
- IC'S
  IC1: SVIGM74LS138
- DIODES
  D1~61: MA162A

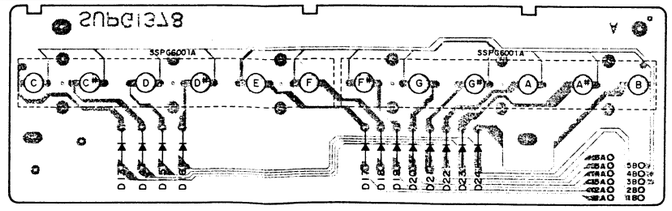
• SX-K700

MKB 2 MANUAL KEYBOARD 2 CIRCUIT BOARD — SXPG137711



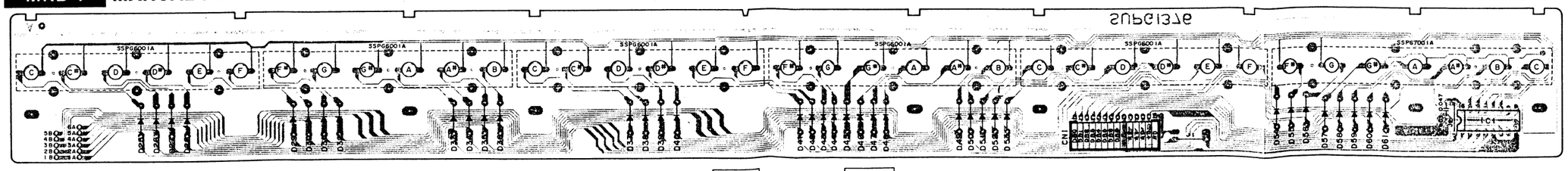
• SX-K500

MKB 3 MANUAL KEYBOARD 3 — SXPG137811

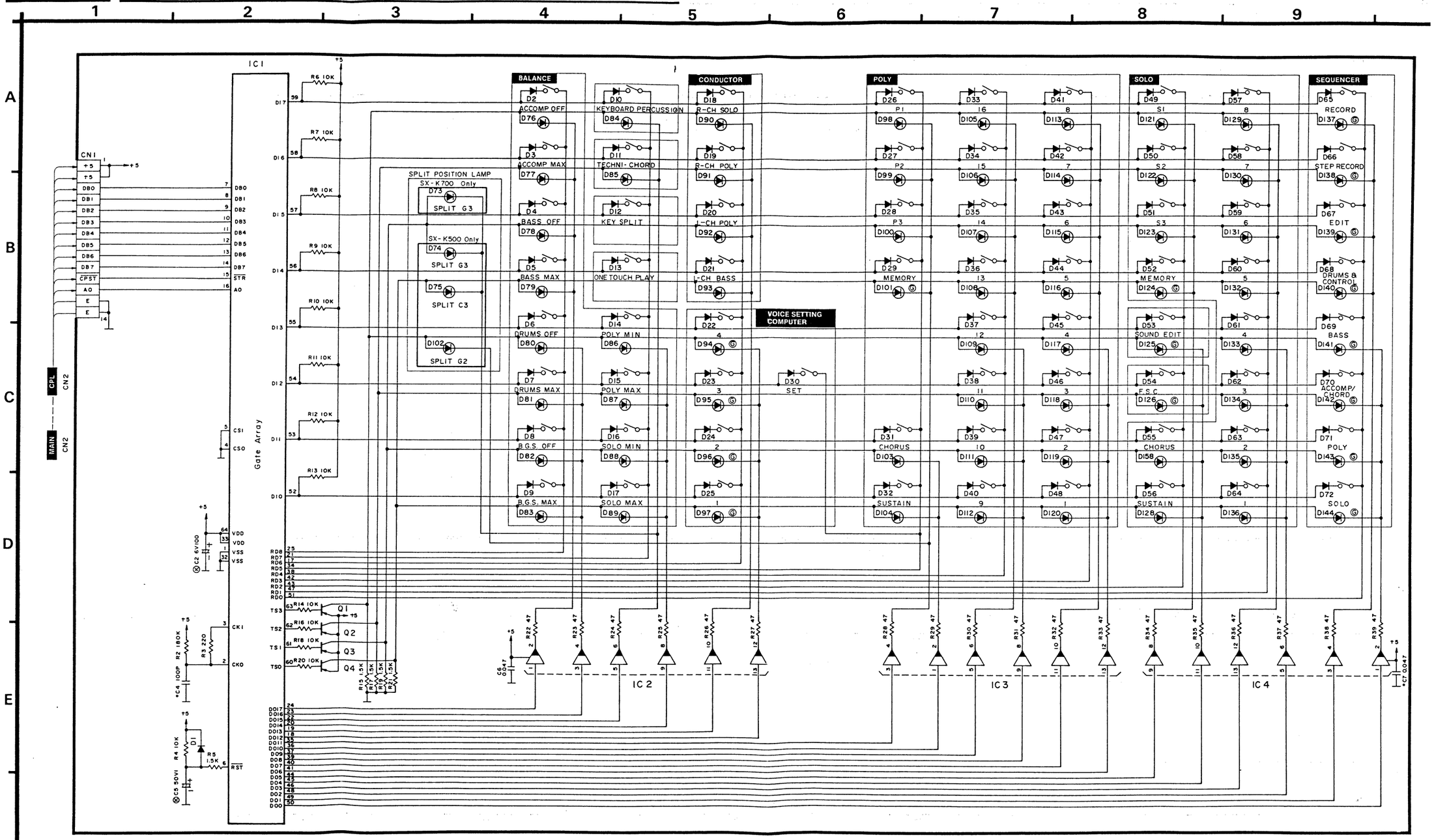


• SX-K700/K500

MKB 1 MANUAL KEYBOARD 1 CIRCUIT BOARD — SXPG137621



CPR CONTROL PANEL RIGHT CIRCUIT DIAGRAM



NOTES:

- IC'S
  - IC1: SVIGM603A121
  - IC2~4: SVIGM74LS07
- TRANSISTORS
  - Q1~4: 2SA830SB
- DIODES
  - D1~72: MA165TA5
- LED'S
  - D73: SVDGSEL4214S (red), SX-K700 only
  - D74, 75, 102: SVDGSEL4214S (red), SX-K500 only
  - D76~93, 98~100, 103~123, 128~136, 158: SVDGSEL4117R (red)
  - D94~97, 101, 124~126, 137~144: SVDGSEL4417G (green)

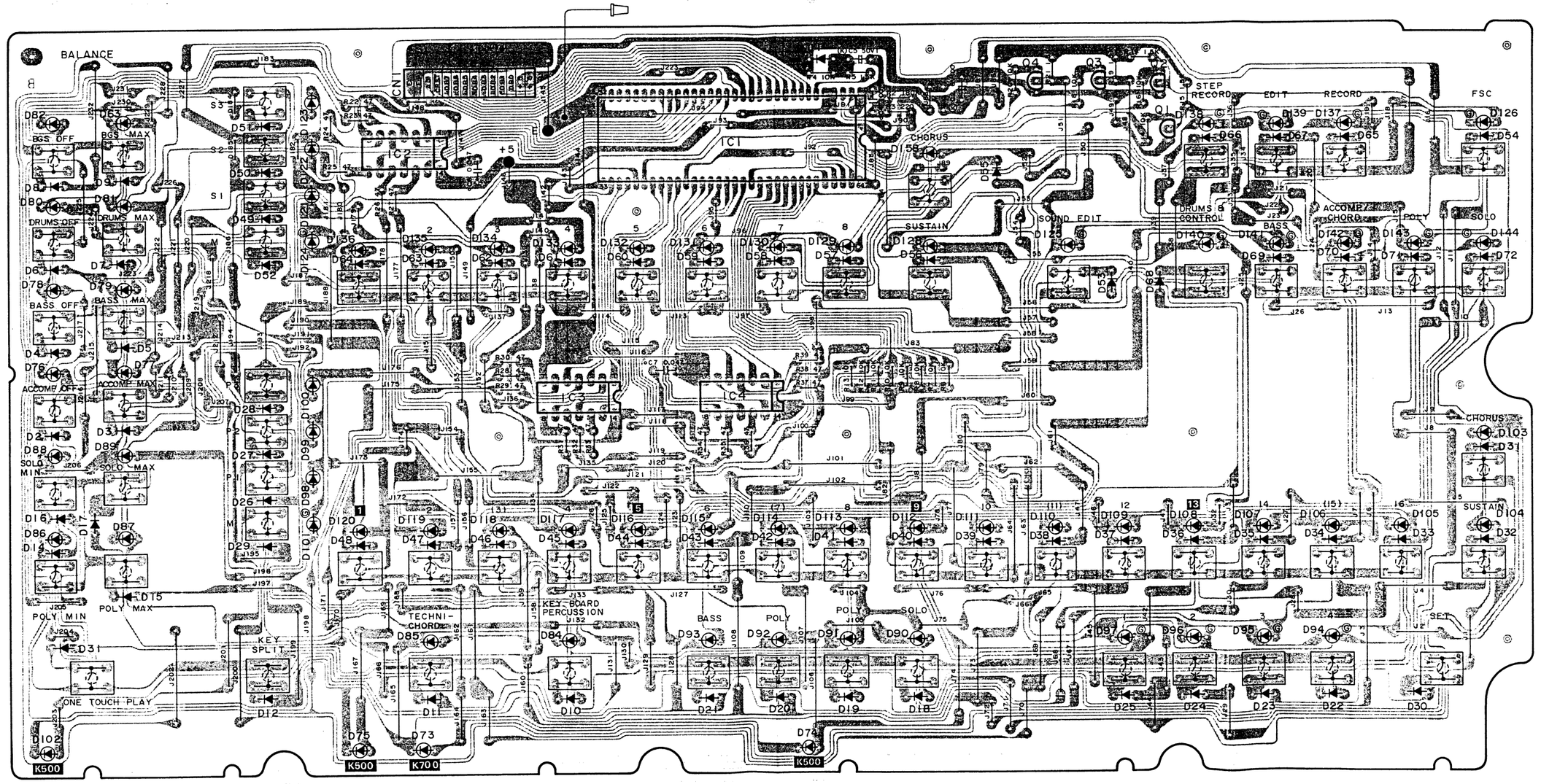
CPR CONTROL PANEL RIGHT CIRCUIT BOARD

• P.C.B. comparison chart

Model	P.C.B. No.	D73	D74, 75, 102
SX-K700	SXPG138611	○	×
SX-K500	SXPG138621	×	○

• SX-K700 **SXPG138611**

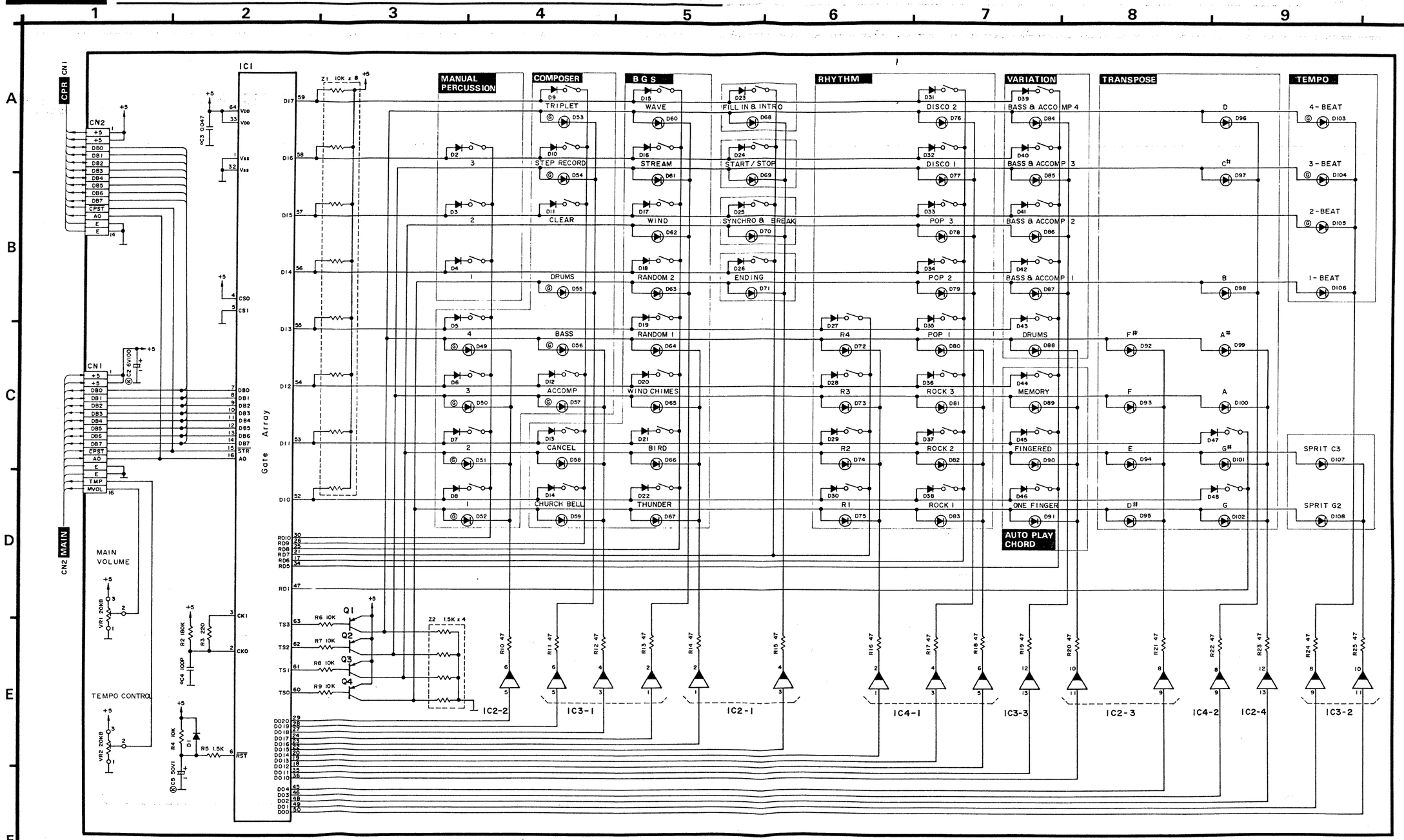
• SX-K500 **SXPG138621**



NOTES:

- IC'S
  - IC1: SVIGM603A121
  - IC2~4: SVIGM74LS07
- TRANSISTORS
  - Q1~4: 2SA830SB
- DIODES
  - D1~72: MA165TA5
- LED'S
  - D73: SVDGSEL4214S (red), **SX-K700** only
  - D74, 75, 102: SVDGSEL4214S (red), **SX-K500** only
  - D76~93, 98~100, 103~123, 128~136, 158: SVDGSEL4117R (red)
  - D94~97, 101, 124~126, 137~144: SVDGSEL4417G (green)

CPL CONTROL PANEL LEFT CIRCUIT DIAGRAM (K700)

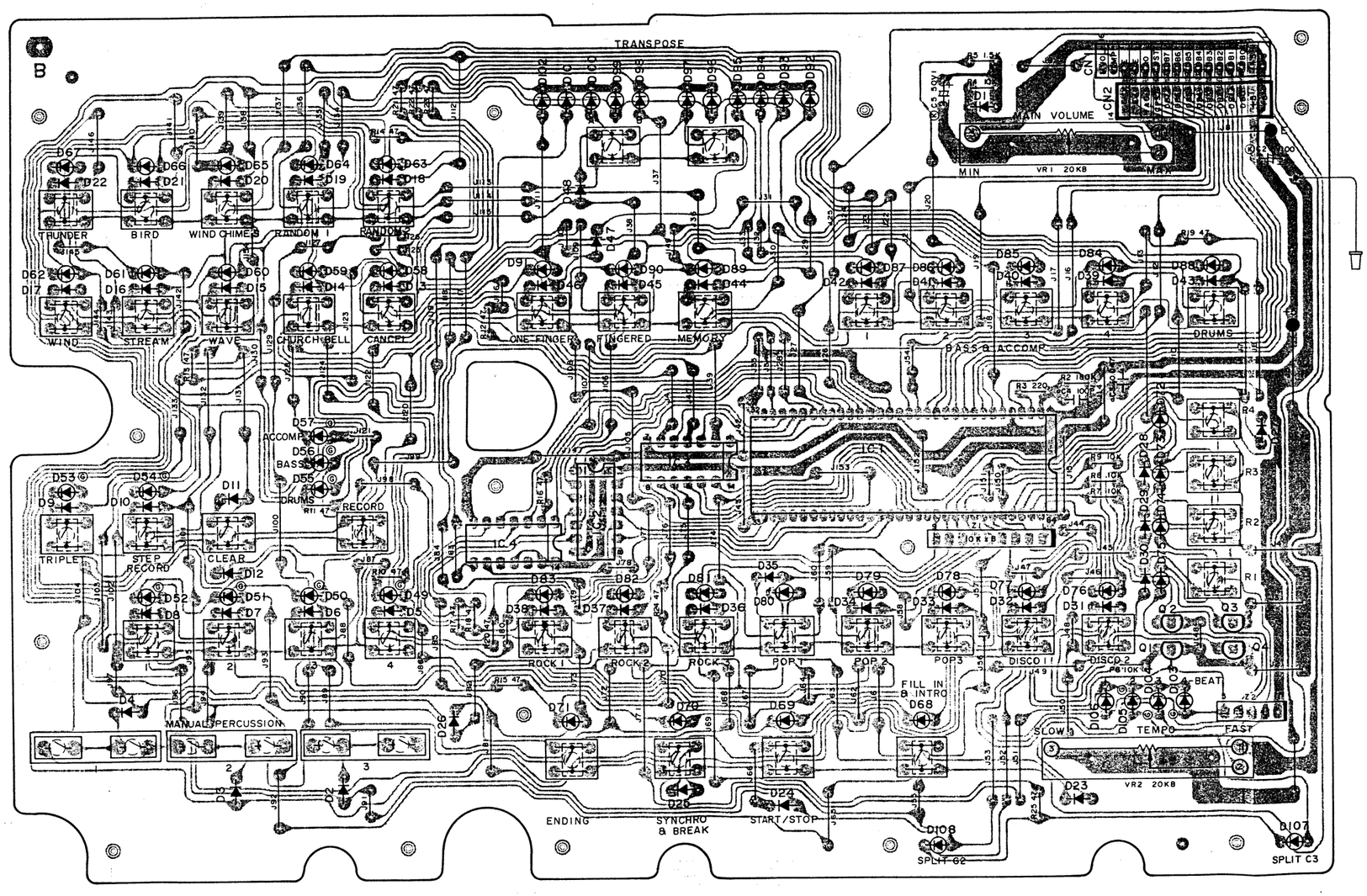


NOTES:

- IC'S
  - IC1: SVIGM603A121
  - IC2~4: SVIGM74LS07
- TRANSISTORS
  - Q1~4: 2SA830SB
- DIODES
  - D1~48: MA165TA5
- LED'S
  - D49~57, 103~105: SVDGSEL4117G (green)
  - D58~102, 106: SVDGSEL4117R (red)
  - D107, 108: SVDGSEL4214S (red)

CPL CONTROL PANEL LEFT CIRCUIT BOARD (K700)

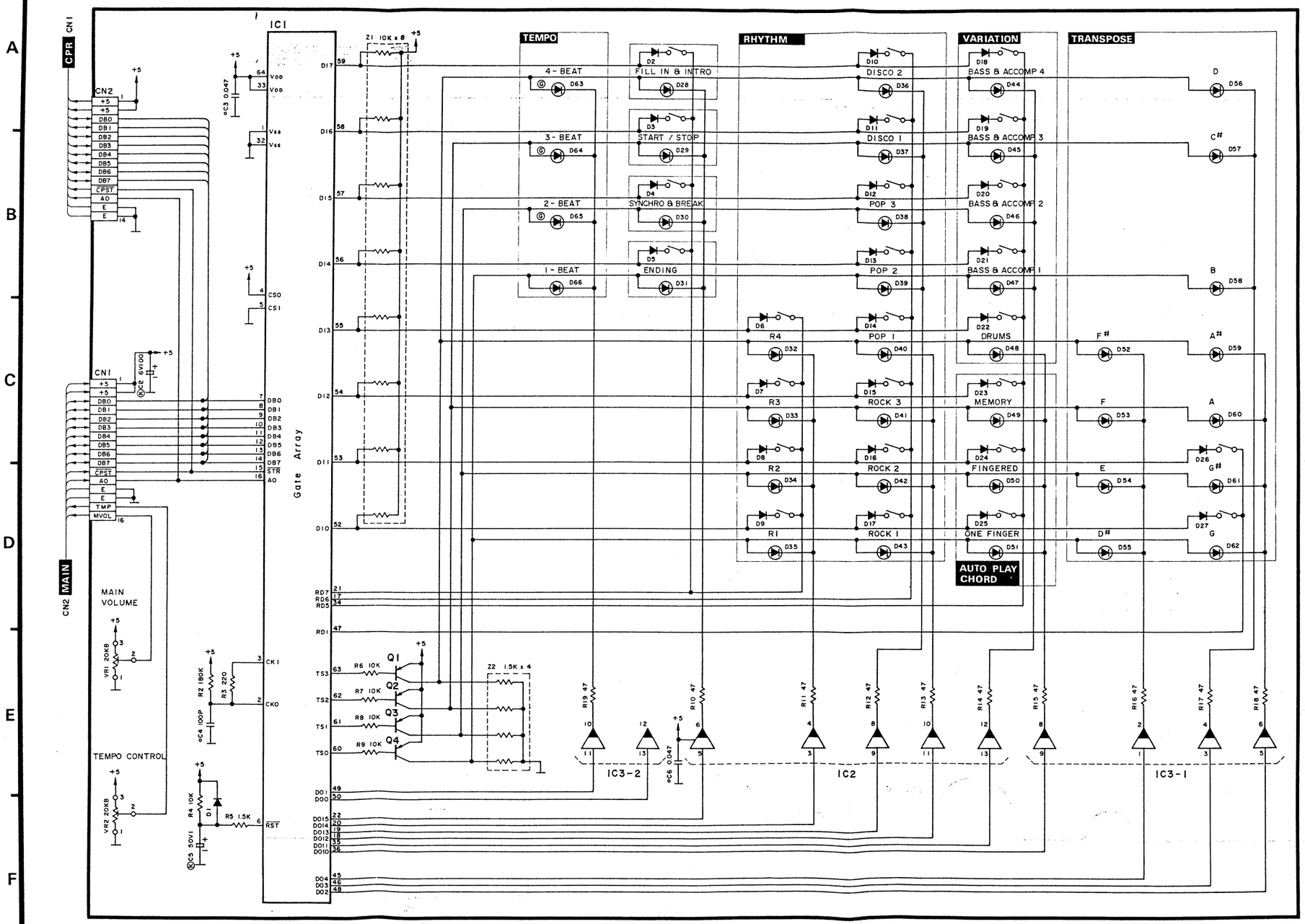
SXPG138411



NOTES:

- IC'S
  - IC1: SVIGM603A121
  - IC2~4: SVIGM74LS07
- TRANSISTORS
  - Q1~4: 2SA830SB
- DIODES
  - D1~48: MA165TA5
- LED'S
  - D49~57, 103~105: SVDGSEL4417G (green)
  - D58~102, 106: SVDGSEL4117R (red)
  - D107, 108: SVDGSEL4214S (red)

CPL CONTROL PANEL LEFT CIRCUIT DIAGRAM (K500)

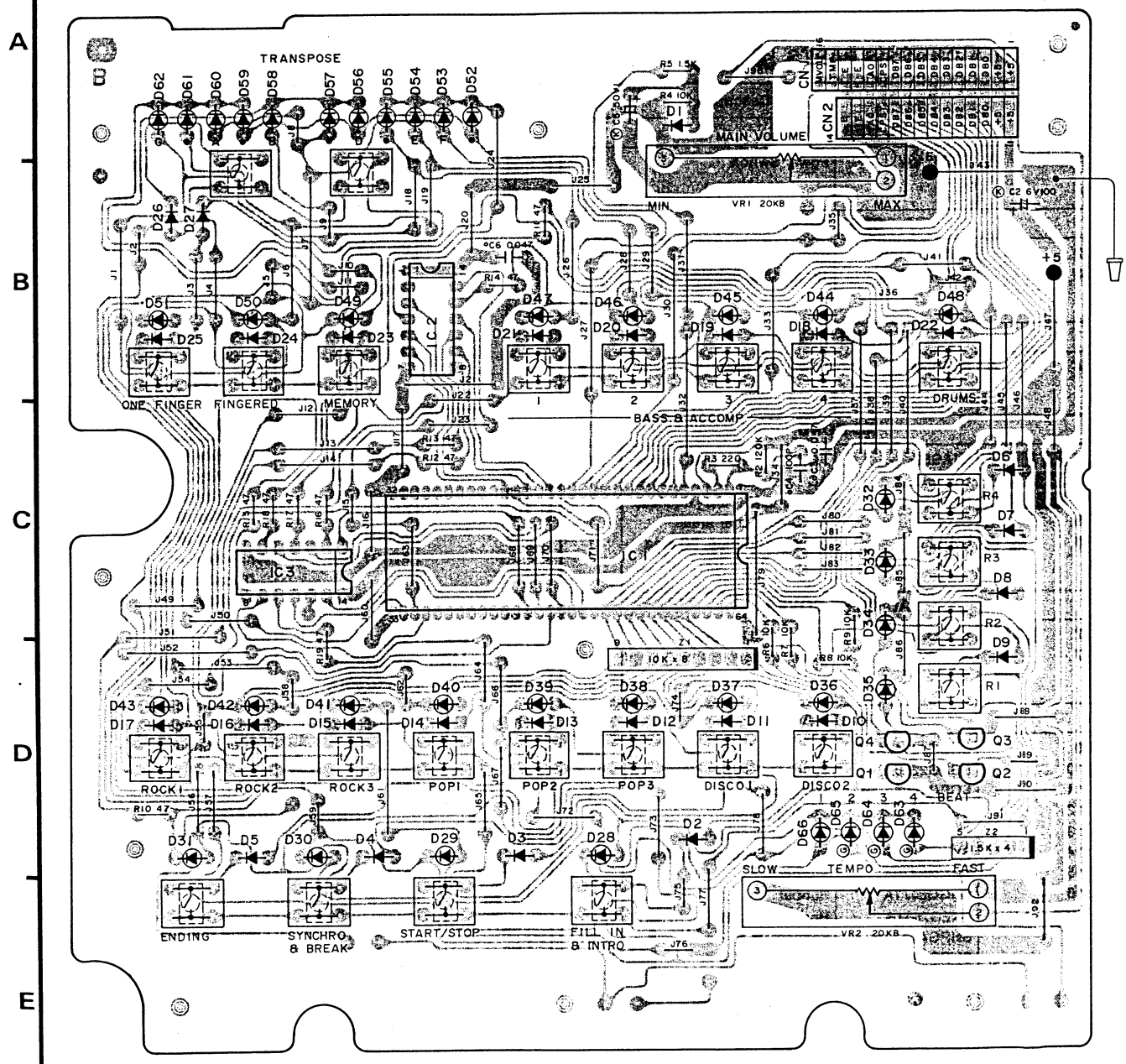


NOTES:

- IC'S
  - IC1: SVIGM603A121
  - IC2, 3: SVIGM74LS07
- TRANSISTORS
  - Q1～4: 2SA830SB
- DIODES
  - D1～27: MA165TA5
- LED'S
  - D28～62, 66: SVDGSEL4117R (red)
  - D63～65: SVDGSEL4417G (green)

CPL CONTROL PANEL LEFT CIRCUIT BOARD (K500)

SXPG138511



NOTES:

- IC'S
  - IC1: SVIGM603A121
  - IC2, 3: SVIGM74LS07
- TRANSISTORS
  - Q1~4: 2SA830SB
- DIODES
  - D1~27: MA165TA5
- LED'S
  - D28~62, 66: SVDGSEL4117R (red)
  - D63~65: SVDGSEL4417G (green)

REPLACEMENT PARTS LIST.....Cabinet and Chassis Parts

Notes:

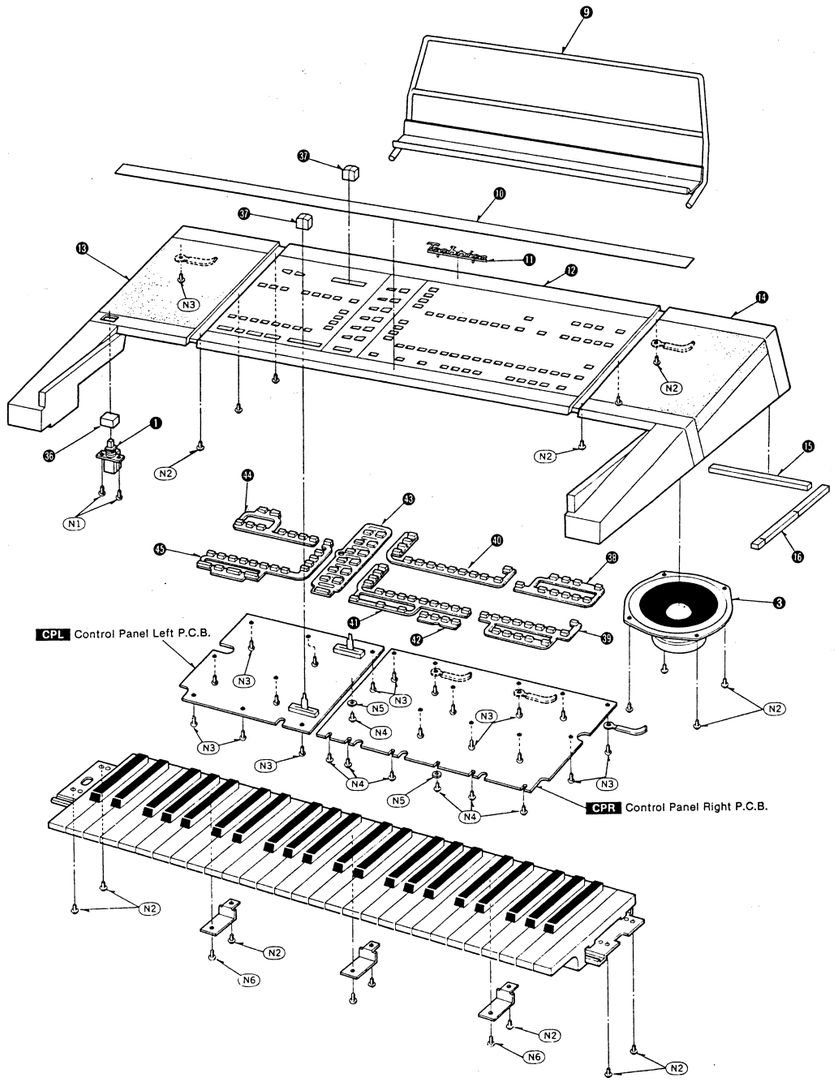
1. Important safety notice
   Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
2. ○ mark are new parts.
3. For part No. with area mark, check the area when placing an order.

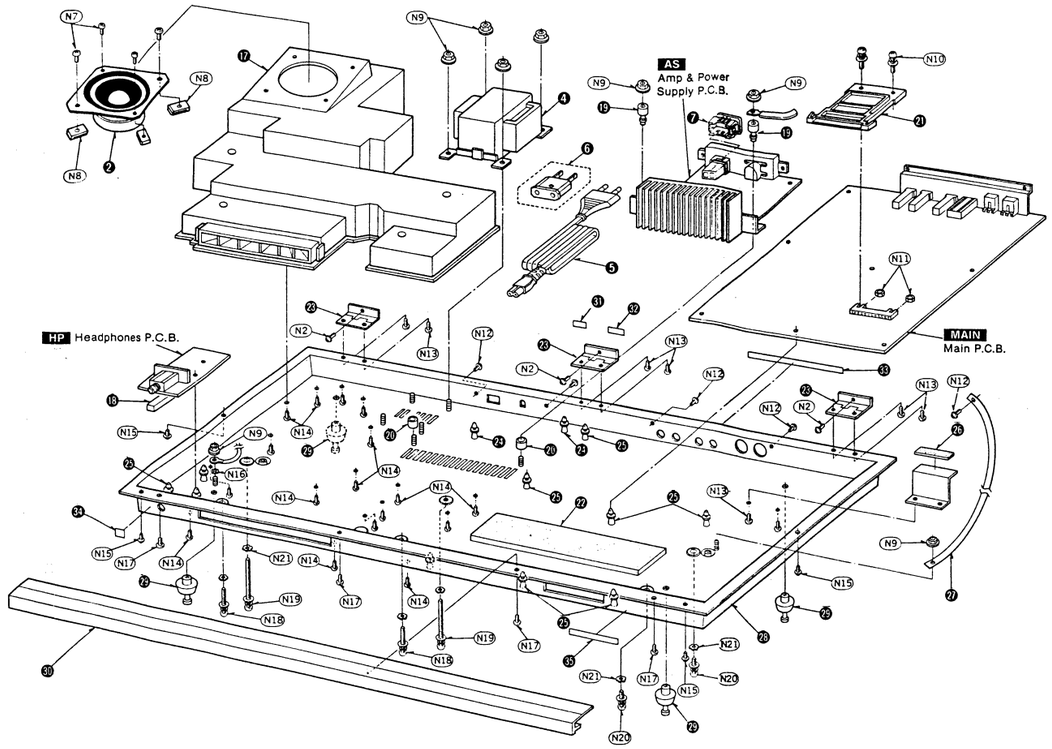
■ CABINET & CHASSIS PARTS SX-K500

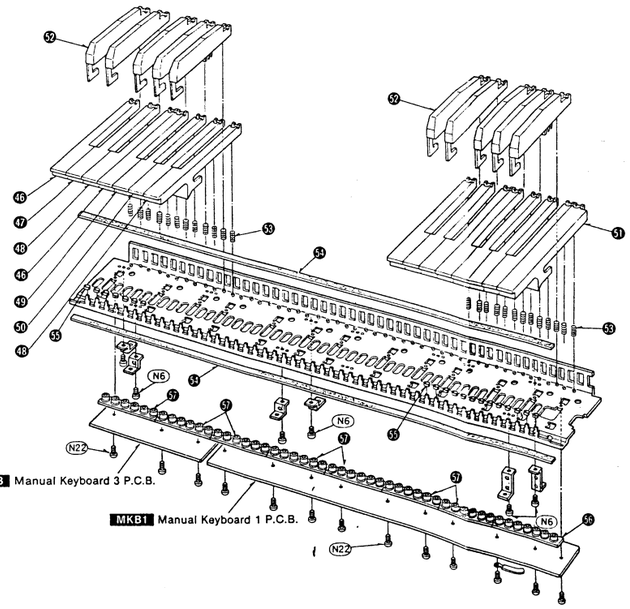
	Ref. No.		Part No.	Description	Per/Set
		POWER SWITCH			
	1	⚠	ESB8213V	Power Switch	1
		SPEAKERS			
○	2		EAS9PL115B	9cm, 16Ω, Speaker (L)	1
○	3		EAS12P429A	12cm, 16Ω, Speaker (R)	1
		TRANSFORMER			
○	4	⚠	SLTG5M36	Power Transformer	1
		AC CORD			
	5	M MC ⚠	SJAG62	AC Cord, [M] and [MC] areas	1
	5	XR XL ⚠	SJAG61	AC Cord, [XR] and [XL] areas	1
	5	EK XS ⚠	SJAG39	AC Cord, [EK] and [XS] areas	1
	5	⚠	SJAG41	AC Cord, Other areas	1
	6	X ⚠	SJP5213-1	Attachment Plug, [X] area	1
		AC INLET COVER			
	7	XR XL	SJS9334A	[XR] and [XL] areas	1
	7		SJS9231A	Other areas	1
		CABINET PARTS			
○	9		SKGG1J110A	Music Rack	1
○	10		SGKG2210A	Keyboard Guide	1
	11		SGBG150A	Technics Badge	1
○	12		SGWG1871B	Control Panel	1
○	13		SYWG1880B	Speaker Escutcheon, Left	1
○	14		SYWG1881B	Speaker Escutcheon, Right	1
○	15		SHGG8470A	Rubber	1
○	16		SHGG8471A	Rubber	1
○	17		SKEG7631B	Horn Loaded Box	1
○	18		SHRGA7110A	Sponge	1
	19		SHRG4130A	Spacer A	2
	20		SHRG4140A	Spacer B	2
○	21		SKEG7610A	Receptacle for Memory Card	1
○	22		SHRGA7100A	Sponge	1
○	23		SBHG220A	Hinge	3
	24		SHRG9850A	P.C.B. Holder	2
	25		SHRG9490A	P.C.B. Holder	10
	26		SHSG2800A	Felt	1
○	27		SHRG9870A	Band	1
○	28	M MC	SKUG121A	Bottom Board, [M] and [MC] areas	1
○	28		SKUG120A	Bottom Board	1
○	29		SHRG2240A	Foot	4
○	30		SGXG2760B	Ornament	1
○	31		SGKG3250A	Label (AC IN)	1
○	32		SGKG3190B	Label (VOLT ADJ)	1
○	33		SGKG3240A	Label (LINE OUT etc.)	1
○	34		SGKG3040B	Label (Headphones)	1
○	35		SQTG8090A	Label (MEMORY CARD)	1

	Ref. No.	Part No.	Description	Per/Set
	KNOBS & BUTTONS			
○	36	SBCG110C	Button, Power Switch	1
	37	SBNG7050A	Knob, Main Volume, Tempo	2
○	38	SBCG280A	Button A	1
○	39	SBCG290A	Button B	1
○	40	SBCG300A	Button C	1
○	41	SBCG310A	Button D	1
○	42	SBCG320A	Button E	1
○	43	SBCG330A	Button F	1
○	44	SBCG340A	Button G	1
○	45	SBCG350A	Button H	1
	MANUAL KEYBOARD			
	46	STBG1100A	White Key (C and F Key)	8
	47	STBG1110A	White Key (D Key)	4
	48	STBG1120A	White Key (E and B Key)	8
	49	STBG1130A	White Key (G Key)	4
	50	STBG1140A	White Key (A Key)	4
	51	STBG1150A	White Key (Top Octave C Key)	1
	52	STBG2070A	Black Key	20
	53	SUSG270A	Spring	49
	54	SHSG1930A	Felt	2
	55	SHGG9050A	Key Guide Rubber	49
	56	SSPG7001A	Rubber Switch (7 continuous)	1
	57	SSPG6001A	Rubber Switch (6 continuous)	7
	SCREWS & WASHERS			
	N1	SNEG740A	Screw	2
	N2	XTW3+12Q	Screw	20
	N3	XTV3+10G	Screw	19
	N4	XTW3+10Q	Screw	7
○	N5	SNEG451A	Plastic Washer	2
	N6	XTB3+5C	Screw	9
	N7	XTB4+10AFZ	Screw	4
○	N8	SNEG2130A	Speed Nut	4
	N9	SNE499-1	Nut	8
	N10	XYN3+F10S	Screw, with Washer	2
	N11	XNG3B	Nut	2
	N12	XTW3+8JFZ	Screw	5
	N13	XTV3+6CFZ	Screw	8
	N14	XTV3+10GFZ	Screw	17
	N15	XTW3+12QFVC	Screw	4
○	N16	XWC4BFY	Washer	1
	N17	XTW3+8QFZ	Screw	4
○	N18	XYN5+F30FVC	Screw, with Washer	2
○	N19	XYN5+F45FVC	Screw, with Washer	2
○	N20	XYN5+F15FVC	Screw, with Washer	2
○	N21	XWC5BFY	Washer	6
	N22	XTW3+10T	Screw	13

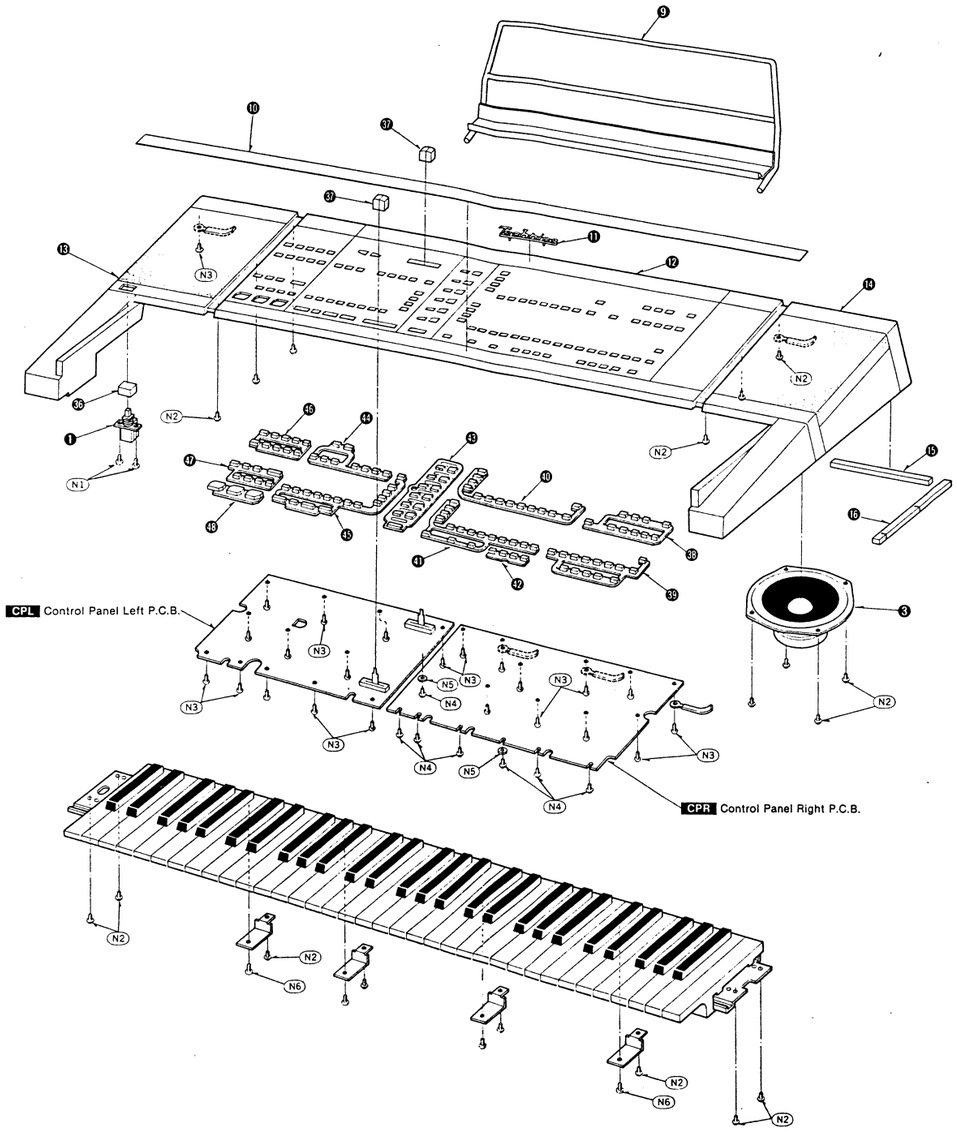
K500 EXPLODED VIEWS OF CABINET

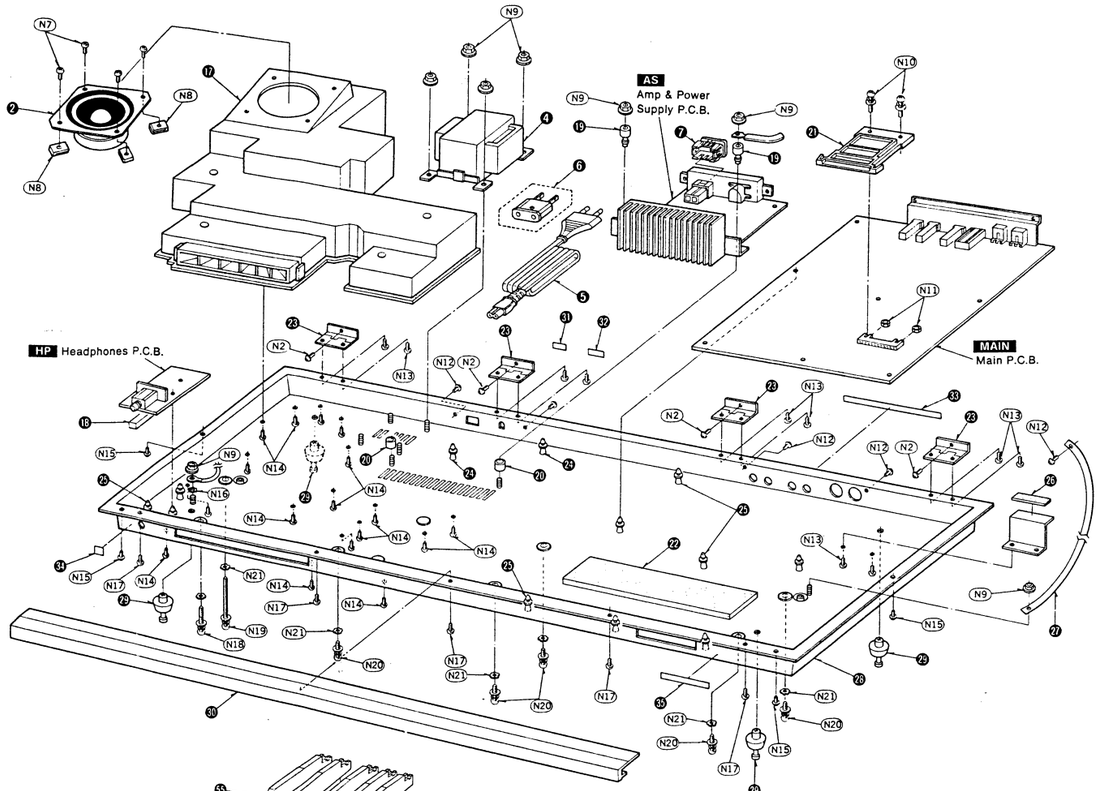


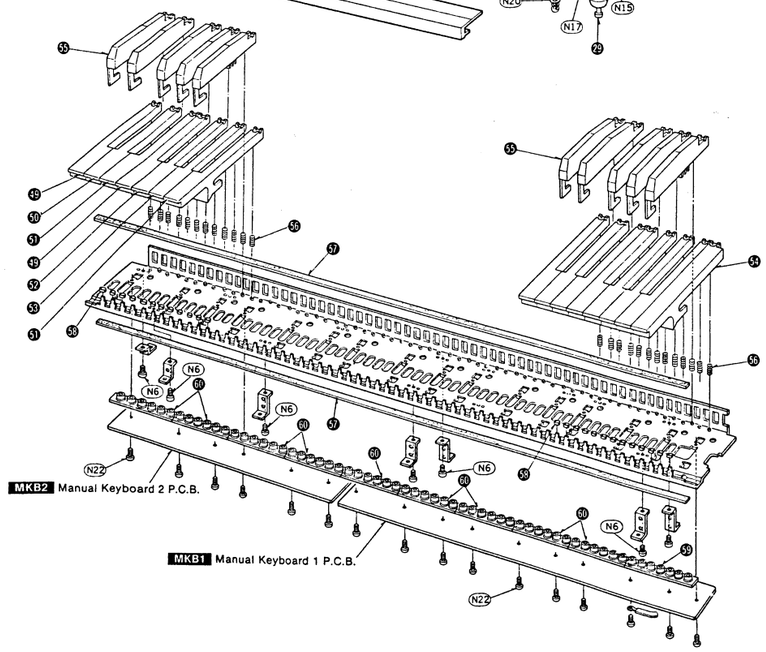




K700 EXPLODED VIEWS OF CABINET







■ CABINET & CHASSIS PARTS SX-K700

	Ref. No.		Part No.	Description	Per/Set
		POWER SWITCH			
	1	⚠	ESB8213V	Power Switch	1
		SPEAKERS			
○	2		EAS9PL115B	9cm, 16Ω, Speaker (L)	1
○	3		EAS12P429A	12cm, 16Ω, Speaker (R)	1
		TRANSFORMER			
○	4	⚠	SLTG5M36	Power Transformer	1
		AC CORD			
	5	M MC ⚠	SJAG62	AC Cord, [M] and [MC] areas	1
	5	XR XL ⚠	SJAG61	AC Cord, [XR] and [XL] areas	1
	5	EK XS ⚠	SJAG39	AC Cord, [EK] and [XS] areas	1
	5	⚠	SJAG41	AC Cord, Other areas	1
	6	X ⚠	SJP5213-1	Attachment Plug, [X] area	1
		AC INLET COVER			
	7	XR XL	SJS9334A	[XR] and [XL] areas	1
	7		SJS9231A	Other areas	1
		CABINET PARTS			
○	9		SKGG1J110A	Music Rack	1
○	10		SGKG2200A	Keyboard Guide	1
	11		SGBG150A	Technics Badge	1
○	12		SGWG1870B	Control Panel	1
○	13		SYWG1880B	Speaker Escutcheon, Left	1
○	14		SYWG1881B	Speaker Escutcheon, Right	1
○	15		SHGG8470A	Rubber	1
○	16		SHGG8471A	Rubber	1
○	17		SKEG7631B	Horn Loaded Box	1
○	18		SHRGA7110A	Sponge	1
	19		SHRG4130A	Spacer A	2
	20		SHRG4140A	Spacer B	2
○	21		SKEG7610A	Receptacle for Memory Card	1
○	22		SHRGA7100A	Sponge	1
○	23		SBHG220A	Hinge	4
	24		SHRG9850A	P.C.B. Holder	2
	25		SHRG9490A	P.C.B. Holder	10
	26		SHSG2800A	Felt	1
○	27		SHRG9870A	Band	1
○	28	M MC	SKUG111A	Bottom Board, [M] and [MC] areas	1
○	28		SKUG110A	Bottom Board	1
○	29		SHRG2240A	Foot	4
○	30		SGXG2750B	Ornament	1
○	31		SGKG3250A	Label (AC IN)	1
○	32		SGKG3190B	Label (VOLT ADJ)	1
○	33		SGKG3240A	Label (LINE OUT etc.)	1
○	34		SGKG3040B	Label (Headphones)	1
○	35		SQTG8090A	Label (MEMORY CARD)	1

	Ref. No.	Part No.	Description	Per/Set
	KNOBS & BUTTONS			
○	36	SBCG110C	Button, Power Switch	1
	37	SBNG7050A	Knob, Main Volume, Tempo	2
○	38	SBCG280A	Button A	1
○	39	SBCG290A	Button B	1
○	40	SBCG300A	Button C	1
○	41	SBCG310A	Button D	1
○	42	SBCG320A	Button E	1
○	43	SBCG330A	Button F	1
○	44	SBCG340A	Button G	1
○	45	SBCG350A	Button H	1
○	46	SBCG360A	Button I	1
○	47	SBCG370A	Button J	1
○	48	SBCG380A	Button K	1
	MANUAL KEYBOARD			
	49	STBG1100A	White Key (C and F Key)	10
	50	STBG1110A	White Key (D Key)	5
	51	STBG1120A	White Key (E and B Key)	10
	52	STBG1130A	White Key (G Key)	5
	53	STBG1140A	White Key (A Key)	5
	54	STBG1150A	White Key (Top Octave C Key)	1
	55	STBG2070A	Black Key	25
	56	SUSG270A	Spring	61
	57	SHSG1970A	Felt	2
	58	SHGG9050A	Key Guide Rubber	61
	59	SSPG7001A	Rubber Switch (7 continuous)	1
	60	SSPG6001A	Rubber Switch (6 continuous)	9
	SCREWS & WASHERS			
	N1	SNEG740A	Screw	2
	N2	XTW3+12Q	Screw	23
	N3	XTV3+10G	Screw	22
	N4	XTW3+10Q	Screw	7
○	N5	SNEG451A	Plastic Washer	2
	N6	XTB3+5C	Screw	11
	N7	XTB4+10AFZ	Screw	4
○	N8	SNEG2130A	Speed Nut	4
	N9	SNE499-1	Nut	8
	N10	XYN3+F10S	Screw, with Washer	2
	N11	XNG3B	Nut	2
	N12	XTW3+8JFZ	Screw	5
	N13	XTV3+6CFZ	Screw	10
	N14	XTV3+10GFZ	Screw	17
	N15	XTW3+12QFVC	Screw	4
○	N16	XWC4BFY	Washer	1
	N17	XTW3+8QFZ	Screw	5
○	N18	XYN5+F30FVC	Screw, with Washer	1
○	N19	XYN5+F45FVC	Screw, with Washer	1
○	N20	XYN5+F15FVC	Screw, with Washer	5
○	N21	XWC5BFY	Washer	7
	N22	XTW3+10T	Screw	16

REPLACEMENT PARTS LIST.....P.C.B. and Wiring Parts

Notes:

1. Printed circuit boards are supplied only during the period of production.
2. Important safety notice
   Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. The "S" mark is service standard parts and may differ from production parts.
4. ○ mark are new parts.
5. For part No. with area mark, check the area when placing an order.

■ Numbering System of Resistor

- All resistors are 1/4 WATT, ±5% TOLERANCE unless otherwise designated in the schematic diagram.
- Resistors with Ⓕ symbolic mark are Flame-Proof resistors.
- Resistors with [F] symbolic mark are fuse type Flame-Proof resistors.

Resistor Type	Wattage	Tolerance
ERD : Carbon ERD—F : Carbon, Flame-Proof ERO : Metal Film	S2 : 1/4W 2 : 1/4W 25 : 1/4W 50 : 1/2W	F : ±1% G : ±2% J : ±5%
ERQ : Metal Oxide Fuse Type ERG : Metal Oxide ERX : Metal Film	14 : 1/4W 1 : 1W	

Example:

Carbon: ERD (Type) S2 (Wattage) T (Shape) J (Tolerance) 101 (Value)

Carbon Flame-Proof: ERD (Type) 2 (Wattage) F (Flame-Proof) C (Fuse Type) G (Tolerance) 101 (Value)

Metal Oxide, Fuse Type: ERQ (Type) 14 (Wattage) A (Flame-Proof) J (Tolerance) 2R0 (Value)

Metal Oxide, (Metal Film): ERG(X) (Type) 1 (Wattage) AN (Shape) J (Tolerance) 221 (Value)

■ Numbering System of Capacitor

- All capacitors are microfarads unless otherwise specified in the schematic diagram.

Capacitor Type	Symbol Mark	Voltage		Tolerance
		ECEA Type	Others	
ECEA(T) : Electrolytic		0J : 6.3V	1H : 50V	ECEA Type : ±20%
ECEA—N : Non-Polar Electrolytic	Ⓝ	1C : 16V	1E : 25V	J : ±5%
ECEA—Y : Non-Polar Electrolytic	Ⓨ	1E : 25V		K : ±10%
ECEA—M : Electrolytic, MSR Series	Ⓜ	1V : 35V		Z : +80 −20 %
ECEA—K : Electrolytic, miniature type	Ⓚ	1H : 50V		
ECQV : TF Capacitor	Ⓣ	35 : 35V		
ECQB : Polyester	Ⓣ			
ECQM(G) : Polyester				
ECC : Ceramic	○			
ECK : Ceramic	○			

Example:

Electrolytic: ECEA(T) (Type) 0J (Voltage) U(R) (Peculiarity use) 470 (Value)

MSR Series: ECEA (Type) 50 (Voltage) M (Peculiarity use) 1 (Value) R (Special use)

TF, Polyester: ECQV (Type) 1H (Voltage) 104 (Value) J (Tolerance)

Ceramic: ECC (Type) R (Shape) 1H (Voltage) 220 (Value) J (Tolerance)

Ceramic: ECK (Type) R (Shape) 1E (Voltage) 473 (Value) Z (Tolerance) V (Peculiarity use)

■ PRINTED CIRCUIT BOARD

Ref. No.	Part No.	Description	Per/Set
SX-K700			
○	SXPG138311	Main	1
○ M MC	SXPG138721	Amp & Power Supply, [M] and [MC] areas	1
○ XR XL	SXPG138741	Amp & Power Supply, [XR] and [XL] areas	1
○	SXPG138711	Amp & Power Supply	1
○	SXPG138811	Headphones	1
○	SXPG137621	Manual Keyboard 1	1
○	SXPG137711	Manual Keyboard 2	1
○	SXPG138611	Control Panel Right	1
○	SXPG138411	Control Panel Left	1
SX-K500			
○	SXPG138321	Main	1
○ M MC	SXPG138721	Amp & Power Supply, [M] and [MC] areas	1
○ XR XL	SXPG138741	Amp & Power Supply, [XR] and [XL] areas	1
○	SXPG138711	Amp & Power Supply	1
○	SXPG138811	Headphones	1
○	SXPG137621	Manual Keyboard 1	1
○	SXPG137811	Manual Keyboard 3	1
○	SXPG138621	Control Panel Right	1
○	SXPG138511	Control Panel Left	1

MAIN MAIN CIRCUIT

Ref. No.	Part No.	Description	Per/Set
INTEGRATED CIRCUITS			
IC1	SVIGPC900	Photo Coupler	1
IC2	SVIGM74LS05	Hex Inverter O.C.	1
IC3	SVIG7810H	1 chip 8 bit Microcomputer	1
IC4	SVIGM603A114	Gate Array	1
IC6	SVIGTC40H374	3 STATE D-type Flip-Flop	1
IC7	SVIGTC40H004	Hex Inverter	1
IC8	SVIGTC40H000	Quadruple NAND Gate	1
○ IC10	SVIG10K700A0	1M bit EPROM	1
IC11, 12	SVIGD446415L	64K bit SRAM	2
IC13	SVIGD446C25	16K bit SRAM	1
IC14, 19	MN6635	Digital Sound Processor	2
○ IC15	SVIGM304C206	4M bit Mask ROM	1
IC16, 21	SVIGBA9221	12 bit D-A Converter	2
IC17, 22	SVIGM5238L	Operational Amplifier	2
IC18, 23	MN74HC4051	8-channel Multiplexer	2
○ IC20 K700	SVIGU302C270	2M bit Mask ROM, SX-K700 only	1
IC24, 41~47, 50, 51, 54	SVIGM5218L	Operational Amplifier	11
IC25~35	SVIGUPD4066B	Quadruple Bilateral Switch	11
IC36~40	SVIG74HC4066	Quadruple Bilateral Switch	5
IC48	SVIGMSM4011	Quadruple NAND Gate	1
IC49	MN3009	BBD (256-stages)	1
IC52	SVIGLM1894N	Dynamic Noise Reduction	1
IC53	SVIGM5241L	Dual VCA	1

	Ref. No.	Part No.	Description	Per/Set
	TRANSISTORS			
S	Q1, 2, 4	2SA1015-GR	2SA933STRS	3
S	Q3, 10	2SC2320LFG	2SC1310FG	2
	Q5~9	2SJ40CD	FET	5
	DIODES			
	D1~11	MA165TA5		11
	COMPONENT COMBINATIONS			
	Z1	EXBP84472JM	4.7KΩ×4	1
	Z2, 5	EXBP88472JM	4.7KΩ×8	2
	Z7, 8	EXKS14Z2073	1K/2KΩ, Ladder Network	2
	OSCILLATORS			
	X1	SVQG49S1500T	15MHz, Quartz Oscillator	1
	X2	EF0FC4004A3	4MHz, Ceramic Oscillator	1
	X3	SVQG49S1600T	16MHz, Quartz Oscillator	1
	COILS			
	L1, 6	SLQG15W33AP		2
○	L2	SLQG15W24DPQ		1
	JACKS			
	JK1	SJJG100A	EXP Pedal	1
	JK2, 3	SJSG1370A	MIDI (IN, OUT)	2
	JK4~6	SJJG400A	Foot SW, Line Out (L, R/R+L)	3
	SOCKET			
○	CN4	SJPG8JA301A	Memory Card Socket	1
	SEMI-FIXED RESISTOR			
	VR1	EVSG0E1B223A	22KΩ B, BBD Bias	1
	RESISTORS			
	R1	ERDS2TJ222	2.2KΩ	1
	R2	ERDS2TJ104	100KΩ	1
	R3, 4	ERDS2TJ102	1KΩ	2
	R5, 6	ERDS2TJ331	330Ω	2
	R7	ERDS2TJ473	47KΩ	1
	R8	ERDS2TJ221	220Ω	1
	R9	ERDS2TJ680	68Ω	1
	R10	ERDS2TJ151	150Ω	1
	R11	ERDS2TJ102	1KΩ	1
	R12	ERDS2TJ103	10KΩ	1
	R13~16	ERDS2TJ102	1KΩ	4
F	R17 ⚠	ERD2FCJ6R8	6.8Ω, 1/4W, Fuse Type	1
	R18, 19	ERDS2TJ103	10KΩ	2
	R20	ERDS2TJ183	18KΩ	1
	R21	ERDS2TJ332	3.3KΩ	1
	R22~24	ERDS2TJ472	4.7KΩ	3
	R25	ERDS2TJ105	1MΩ	1
	R26	ERDS2TJ102	1KΩ	1

	Ref. No.	Part No.	Description	Per/Set
	R27	ERDS2TJ473	47KΩ	1
	R28	ERDS2TJ103	10KΩ	1
	R29	ERDS2TJ823	82KΩ	1
	R30	ERDS2TJ223	22KΩ	1
	R31	ERDS2TJ103	10KΩ	1
	R32	ERDS2TJ221	220Ω	1
F	R33~35 ⚠	ERD2FCG100	10Ω, 1/4W, Fuse Type	3
	R36, 37	ERDS2TJ471	470Ω	2
	R38	ERDS2TJ153	15KΩ	1
	R39, 40	ERDS2TJ471	470Ω	2
	R41, 42	ERDS2TJ472	4.7KΩ	2
	R43, 44	ERDS2TJ102	1KΩ	2
	R45, 46	ERDS2TJ471	470Ω	2
	R47	ERDS2TJ153	15KΩ	1
	R48, 49	ERDS2TJ471	470Ω	2
	R50	ERDS2TJ151	150Ω	1
	R51, 52	ERDS2TJ331	330Ω	2
	R53	ERDS2TJ473	47KΩ	1
	R54	ERDS2TJ151	150Ω	1
	R55, 56	ERDS2TJ331	330Ω	2
	R57	ERDS2TJ473	47KΩ	1
	R58	ERDS2TJ151	150Ω	1
	R59, 60	ERDS2TJ331	330Ω	2
	R61	ERDS2TJ473	47KΩ	1
	R62	ERDS2TJ151	150Ω	1
	R63, 64	ERDS2TJ331	330Ω	2
	R65	ERDS2TJ473	47KΩ	1
	R66	ERDS2TJ151	150Ω	1
	R67, 68	ERDS2TJ331	330Ω	2
	R69	ERDS2TJ473	47KΩ	1
	R70	ERDS2TJ151	150Ω	1
	R71, 72	ERDS2TJ331	330Ω	2
	R73	ERDS2TJ473	47KΩ	1
	R74	ERDS2TJ151	150Ω	1
	R75, 76	ERDS2TJ331	330Ω	2
	R77	ERDS2TJ473	47KΩ	1
	R78	ERDS2TJ151	150Ω	1
	R79, 80	ERDS2TJ331	330Ω	2
	R81	ERDS2TJ473	47KΩ	1
	R82	ERDS2TJ151	150Ω	1
	R83, 84	ERDS2TJ331	330Ω	2
	R85	ERDS2TJ473	47KΩ	1
	R86	ERDS2TJ151	150Ω	1
	R87, 88	ERDS2TJ331	330Ω	2
	R89	ERDS2TJ473	47KΩ	1
	R90	ERDS2TJ151	150Ω	1
	R91, 92	ERDS2TJ331	330Ω	2
	R93	ERDS2TJ473	47KΩ	1
	R94	ERDS2TJ151	150Ω	1
	R95, 96	ERDS2TJ331	330Ω	2
	R97	ERDS2TJ473	47KΩ	1
	R98	ERDS2TJ151	150Ω	1
	R99, 100	ERDS2TJ331	330Ω	2
	R101	ERDS2TJ473	47KΩ	1
	R102	ERDS2TJ151	150Ω	1
	R103, 104	ERDS2TJ331	330Ω	2
	R105	ERDS2TJ473	47KΩ	1
	R106	ERDS2TJ151	150Ω	1
	R107, 108	ERDS2TJ331	330Ω	2
	R109	ERDS2TJ473	47KΩ	1
	R110	ERDS2TJ151	150Ω	1
	R111, 112	ERDS2TJ331	330Ω	2
	R113	ERDS2TJ473	47KΩ	1
	R114	ERDS2TJ104	100KΩ	1
	R115	ERDS2TJ682	6.8KΩ	1
	R116~118	ERDS2TJ473	47KΩ	3
	R119	ERDS2TJ104	100KΩ	1
	R120	ERDS2TJ682	6.8KΩ	1

Ref. No.	Part No.	Description	Per/Set
R121~123	ERDS2TJ473	47KΩ	3
R124	ERDS2TJ104	100KΩ	1
R125	ERDS2TJ682	6.8KΩ	1
R126~128	ERDS2TJ473	47KΩ	3
R129	ERDS2TJ224	220KΩ	1
R130	ERDS2TJ682	6.8KΩ	1
R131, 132	ERDS2TJ683	68KΩ	2
R133	ERDS2TJ563	56KΩ	1
R134	ERDS2TJ184	180KΩ	1
R135	ERDS2TJ472	4.7KΩ	1
R136	ERDS2TJ333	33KΩ	1
R137, 138	ERDS2TJ393	39KΩ	2
R139, 140	ERDS2TJ124	120KΩ	2
R141	ERDS2TJ184	180KΩ	1
R142, 143	ERDS2TJ823	82KΩ	2
R144	ERDS2TJ104	100KΩ	1
R145	ERDS2TJ473	47KΩ	1
R146	ERDS2TJ223	22KΩ	1
R147	ERDS2TJ823	82KΩ	1
R148	ERDS2TJ104	100KΩ	1
R149, 150	ERDS2TJ124	120KΩ	2
R151	ERDS2TJ823	82KΩ	1
R152	ERDS2TJ184	180KΩ	1
R153	ERDS2TJ823	82KΩ	1
R154	ERDS2TJ104	100KΩ	1
R155	ERDS2TJ473	47KΩ	1
R156	ERDS2TJ223	22KΩ	1
R157	ERDS2TJ823	82KΩ	1
R158	ERDS2TJ104	100KΩ	1
R159	ERDS2TJ184	180KΩ	1
R160	ERDS2TJ124	120KΩ	1
R161	ERDS2TJ474	470KΩ	1
R162~165	ERDS2TJ105	1MΩ	4
R166	ERDS2TJ224	220KΩ	1
R167	ERDS2TJ473	47KΩ	1
R168	ERDS2TJ224	220KΩ	1
R169	ERDS2TJ473	47KΩ	1
R170	ERDS2TJ224	220KΩ	1
R171	ERDS2TJ473	47KΩ	1
R172	ERDS2TJ393	39KΩ	1
R173, 174	ERDS2TJ223	22KΩ	2
R175	ERDS2TJ102	1KΩ	1
R176	ERDS2TJ473	47KΩ	1
R177	ERDS2TJ124	120KΩ	1
R178, 179	ERDS2TJ332	3.3KΩ	2
R180	ERDS2TJ124	120KΩ	1
R181	ERDS2TJ183	18KΩ	1
R182, 183	ERDS2TJ103	10KΩ	2
R184	ERDS2TJ473	47KΩ	1
R185	ERDS2TJ105	1MΩ	1
R186	ERDS2TJ223	22KΩ	1
R187	ERDS2TJ153	15KΩ	1
R188	ERDS2TJ154	150KΩ	1
R189	ERDS2TJ103	10KΩ	1
R190	ERDS2TJ333	33KΩ	1
R191, 192	ERDS2TJ473	47KΩ	2
R193	ERDS2TJ104	100KΩ	1
R194	ERDS2TJ473	47KΩ	1
R195, 196	ERDS2TJ104	100KΩ	2
R197, 198	ERDS2TJ331	330Ω	2
R199	ERDS2TJ681	680Ω	1
R200	ERDS2TJ331	330Ω	1
R201	ERDS2TJ153	15KΩ	1
R202	ERDS2TJ823	82KΩ	1
R203	ERDS2TJ101	100Ω	1
R204	ERDS2TJ153	15KΩ	1
R205	ERDS2TJ104	100KΩ	1
R206	ERDS2TJ332	3.3KΩ	1
R207	ERDS2TJ152	1.5KΩ	1
R208	ERDS2TJ823	82KΩ	1
R209	ERDS2TJ101	100Ω	1
R210	ERDS2TJ472	4.7KΩ	1
R211, 212	ERDS2TJ681	680Ω	2
R213	ERDS2TJ472	4.7KΩ	1
R214	ERDS2TJ681	680Ω	1
R215	ERDS2TJ221	220Ω	1

CAPACITORS

Ref. No.	Part No.	Description	Per/Set
○ C1, 2	ECKR1E473ZV	0.047μF	2
C3	ECEA0JU470	47μF, 6.3V	1
○ C4	ECKR1E473ZV	0.047μF	1
○ C5, 6	ECCR1H470J	47PF	2
C7	ECEA0JU221	220μF, 6.3V	1
○ C8~11	ECKR1E473ZV	0.047μF	4
C12	ECEA0JU221	220μF, 6.3V	1
C13	ECEA0JU101	100μF, 6.3V	1
C15	ECEA1HUR47	0.47μF, 50V	1
○ C16	ECKR1E473ZV	0.047μF	1
○ C19	ECKR1E473ZV	0.047μF	1
C20	EECF5R5U104	0.1F, 5.5V, Liquid Electrolyte Double Layer	1
○ C22~25	ECKR1E473ZV	0.047μF	4
C26, 27	ECEA0JU101	100μF, 6.3V	2
C28, 29	ECEA1CU470	47μF, 16V	2
○ C30	ECKR1E473ZV	0.047μF	1
○ C33	ECKR1E473ZV	0.047μF	1
C34	ECEA0JU471	470μF, 6.3V	1
○ C35, 36	ECKR1E473ZV	0.047μF	2
○ C37	ECCR1H221J	220PF	1
○ C38, 39	ECKR1E473ZV	0.047μF	2
C41~43	ECEA0JU470	47μF, 6.3V	3
○ C44	ECKR1E473ZV	0.047μF	1
○ C45	ECCR1H221J	220PF	1
○ C46~48	ECKR1E473ZV	0.047μF	3
C49	ECEA0JU101	100μF. 6.3V	1
○ C50	ECKR1E473ZV	0.047μF	1
○ C52	ECKR1E473ZV	0.047μF	1
C53	ECEA0JU101	100μF, 6.3V	1
○ C54, 55	ECKR1E473ZV	0.047μF	2
C56	ECQG1H472KZ	0.0047μF	1
C57	ECQG1H102KZ	0.001μF	1
C58	ECQG1H472KZ	0.0047μF	1
C59	ECQG1H102KZ	0.001μF	1
C60	ECQG1H472KZ	0.0047μF	1
C61	ECQG1H102KZ	0.001μF	1
C62	ECQG1H472KZ	0.0047μF	1
C63	ECQG1H102KZ	0.001μF	1
C64	ECQG1H472KZ	0.0047μF	1
C65	ECQG1H102KZ	0.001μF	1
C66	ECQG1H472KZ	0.0047μF	1
C67	ECQG1H102KZ	0.001μF	1
C68	ECQG1H472KZ	0.0047μF	1
C69	ECQG1H102KZ	0.001μF	1
C70	ECQG1H472KZ	0.0047μF	1
C71	ECQG1H102KZ	0.001μF	1
C72	ECQG1H472KZ	0.0047μF	1
C73	ECQG1H102KZ	0.001μF	1
C74	ECQG1H472KZ	0.0047μF	1
C75	ECQG1H102KZ	0.001μF	1
C76	ECQG1H472KZ	0.0047μF	1
C77	ECQG1H102KZ	0.001μF	1
C78	ECQG1H472KZ	0.0047μF	1
C79	ECQG1H102KZ	0.001μF	1
C80	ECQG1H472KZ	0.0047μF	1

AS AMP & POWER SUPPLY CIRCUIT

Ref. No.	Part No.	Description	Per/Set
C81	ECQG1H102KZ	0.001μF	1
C82	ECQG1H472KZ	0.0047μF	1
C83	ECQG1H102KZ	0.001μF	1
C84	ECQG1H472KZ	0.0047μF	1
C85	ECQG1H102KZ	0.001μF	1
C86	ECQG1H472KZ	0.0047μF	1
C87	ECQG1H102KZ	0.001μF	1
○ C88	ECCR1H221J	220PF	1
C89	ECQG1H332KZ	0.0033μF	1
○ C90, 91	ECCR1H471J	470PF	2
○ C92	ECCR1H101J	100PF	1
○ C93	ECCR1H221J	220PF	1
C94	ECQG1H332KZ	0.0033μF	1
○ C95, 96	ECCR1H471J	470PF	2
○ C97	ECCR1H101J	100PF	1
○ C98	ECCR1H221J	220PF	1
C99	ECQG1H332KZ	0.0033μF	1
○ C100, 101	ECCR1H471J	470PF	2
○ C102	ECCR1H101J	100PF	1
○ C103	ECCR1H151J	150PF	1
C104	ECQG1H472KZ	0.0047μF	1
○ C105, 106	ECCR1H471J	470PF	2
○ C107, 108	ECCR1H101J	100PF	2
C109	ECQG1H332KZ	0.0033μF	1
○ C110, 111	ECCR1H471J	470PF	2
○ C112	ECCR1H101J	100PF	1
C113	ECEA1HU010	1μF, 50V	1
Ⓝ C114	ECEA1HN010S	1μF, 50V	1
C115	ECQG1H222KZ	0.0022μF	1
○ C116	ECCR1H101J	100PF	1
C117	ECEA1HU010	1μF, 50V	1
Ⓝ C118	ECEA1HN010S	1μF, 50V	1
C119	ECQG1H222KZ	0.0022μF	1
○ C120	ECCR1H101J	100PF	1
ⓉⒻ C121	ECQV1H104JZ	0.1μF	1
C122	ECQM1H153KV	0.15μF	1
○ C123~126	ECKR1E473ZV	0.047μF	4
ⓉⒻ C127~129	ECQV1H104JZ	0.1μF	3
○ C130	ECCR1H101J	100PF	1
C131	ECEA1HU010	1μF, 50V	1
C132	ECEA1CU470	47μF, 16V	1
C133	ECEA1CU101	100μF, 16V	1
○ C134, 135	ECCR1H151J	150PF	2
○ C136	ECKR1E473ZV	0.047μF	1
Ⓝ C137	ECEA1HN010S	1μF, 50V	1
C138	ECQG1H102KZ	0.001μF	1
ⓉⒻ C139	ECQV1H104JZ	0.1μF	1
C140, 141	ECQG1H102KZ	0.001μF	2
○ C142, 143	ECCR1H680J	68PF	2
C144, 145	ECEA1HU010	1μF, 50V	2
C146	ECEA1CU470	47μF, 16V	1
C147	ECQG1H472KZ	0.0047μF	1
ⓉⒻ C148	ECQV1H104JZ	0.1μF	1
C149	ECQG1H102KZ	0.001μF	1
C150	ECQG1H332KZ	0.0033μF	1
C151	ECEA1CU470	47μF, 16V	1
C152	ECQG1H472KZ	0.0047μF	1
C153	ECEA1CU100	10μF, 16V	1
C154	ECQM1H473KV	0.047μF	1
C155	ECEA1HU010	1μF, 50V	1
○ C156	ECCR1H101J	100PF	1
ⓉⒻ C157	ECQV1H104JZ	0.1μF	1
C158	ECEA1HU010	1μF, 50V	1
○ C159	ECCR1H101J	100PF	1
ⓉⒻ C163	ECQV1H224JZ	0.22μF	1
C164, 165	ECQG1H472KZ	0.0047μF	2

Ref. No.	Part No.	Description	Per/Set
INTEGRATED CIRCUITS			
IC1	SVIGM5291P	Switching Regulator	1
IC2	SVIGM5F7815	Voltage Regulator	1
IC3	SVIGM5F7915	Voltage Regulator	1
IC4	SVIGS4132M2M	Power Amplifier	1
TRANSISTORS			
S Q1~3	2SC2320LFG	2SC1310FG	3
S Q4	2SA1015-GR	2SA933STRS	1
Q5	2SB953AQP		1
DIODES			
D1, 2 ⚠	SVDGERA1502Y	Rectifier	2
D3, 4	MA165TA5		2
D5~8 ⚠	SVDS2V20	Rectifier	4
D9	SVDGRK14		1
D10	MA2062LF	Zener	1
COILS & LINE FILTER			
L1 ⚠	SLQG10W2D1	COIL	1
L2 ⚠	SLTGLF3	LINE FILTER	1
L3	SLCG2A121TZ	COIL	1
VOLTAGE SELECTOR			
SW1 ⚠	SSRG100A	Except for [M] and [MC] areas	1
JACK			
JK1 ⚠	SJVD0203B	AC Inlet	1
FUSES			
F1 M MC ⚠	XBA1C16NU100	1.6A, 125V, [M] and [MC] areas	1
F1 ⚠	XBA2C12TB0	T1.25A, 250V } Except for [M] and [MC]areas	1
F2, 3 ⚠	XBA2C063TB0	T630mA, 250V }	2
AC INLET COVER			
XR XL	SJS9334A	[XR] and [XL] areas	1
	SJS9231A	Except for [XR] and [XL] areas	1

Ref. No.	Part No.	Description	Per/Set
RESISTORS			
R1~3	ERDS2TJ103	10KΩ	3
R4	ERDS2TJ102	1KΩ	1
R5	ERDS2TJ101	100Ω	1
R6, 7	ERDS2TJ472	4.7KΩ	2
R8	ERDS2TJ103	10KΩ	1
R9	ERDS2TJ472	4.7KΩ	1
R10	ERDS2TJ155	1.5MΩ	1
R11	ERDS2TJ105	1MΩ	1
R12	ERDS2TJ474	470KΩ	1
R13, 14	ERDS2TJ224	220KΩ	2
Ⓕ R15 ⚠	ERQ14AJ2R0	2Ω, 1/4W, Fuse Type	1
Ⓕ R16 ⚠	ERX1ANJR47	0.47Ω, 1W, Flame-Proof	1
R17	ERDS2TJ101	100Ω	1
Ⓕ R18 ⚠	ERG1ANJ471	470Ω, 1W, Flame-Proof	1
R19	ERDS2TJ332	3.3KΩ	1
R20	ERDS2TJ102	1KΩ	1
R21	ERDS2TJ103	10KΩ	1
R22, 23	ERDS2TJ222	2.2KΩ	2
R24	ERDS2TJ473	47KΩ	1
R25	ERDS2TJ222	2.2KΩ	1
R26, 27	ERDS2TJ152	1.5KΩ	2
Ⓕ R28 ⚠	ERD25FVJ4R7	4.7Ω, 1/4W, Flame-Proof	1
R29	ERDS2TJ103	10KΩ	1
R30, 31	ERDS2TJ222	2.2KΩ	2
R32~34	ERDS2TJ102	1KΩ	3
R35	ERDS2TJ274	270KΩ	1
R36	ERDS2TJ473	47KΩ	1
R37	ERDS2TJ222	2.2KΩ	1
R38, 39	ERDS2TJ152	1.5KΩ	2
Ⓕ R40 ⚠	ERD25FVJ4R7	4.7Ω, 1/4W, Flame-Proof	1
CAPACITORS			
○ C1 ⚠	ECKCVA1472MF	4700PF, 250V, Line Capacitor	1
C2 ⚠	ECQU2A104MN	0.1μF, 250V, Across the Line Capacitor	1
C3	ECQE2A104MW	0.1μF, 250V, Across the Line Capacitor	1
C4	ECEA1VU332	3300μF, 35V	1
C5	ECEA1VU222	2200μF, 35V	1
C6	ECEA0JU101	100μF, 6.3V	1
C7	ECEA1CU100	10μF, 16V	1
C8	ECEA1HU2R2	2.2μF, 50V	1
C9	ECEA1VU100	10μF, 35V	1
C10	ECQG1H102KZ	0.001μF	1
○ C11	ECKR1E473ZV	0.047μF	1
C12	ECEA0JU102	1000μF, 6.3V	1
C13, 14	ECEA1VU100	10μF, 35V	2
Ⓝ C15	ECEA1HN010S	1μF, 50V	1
○ C16	ECCR1H101J	100PF	1
C17	ECEA0JU101	100μF, 6.3V	1
C18	ECEA1EU470	47μF. 25V	1
ⓉⒻ C19, 20	ECQV1H104JZ	0.1μF	2
○ C21	ECCR1H101J	100PF	1
C22	ECEA0JU101	100μF, 6.3V	1
C23	ECEA1VU100	10μF, 35V	1
C24	ECEA1EU470	47μF, 25V	1
ⓉⒻ C25	ECQV1H104JZ	0.1μF	1

HP HEADPHONES CIRCUIT

Ref. No.	Part No.	Description	Per/Set
COIL			
L1	SLQG15W33AP		1
JACK			
JK1	SJJG100A	Headphones	1
RESISTORS			
Ⓕ R1, 2 ⚠	ERD50FJ471	470Ω, 1/2W, Flame-Proof	2
CAPACITORS			
C1, 2	ECQG1H472KZ	0.0047μF	2
ⓉⒻ C3	ECQV1H104JZ	0.1μF	1

MKB1 MANUAL KEYBOARD 1 CIRCUIT

Ref. No.	Part No.	Description	Per/Set
INTEGRATED CIRCUITS			
IC1	SVIGM74LS138	Decoder	1
DIODES			
S D25~61	MA162A	MA150IR	37
SWITCHES			
	SSPG7001A	Rubber Switch (7 continuous)	1
	SSPG6001A	Rubber Switch (6 continuous)	5
CAPACITOR			
○ C1	ECKR1E473ZV	0.047μF	1

MKB2 MANUAL KEYBOARD 2 CIRCUIT (Products for SX-K700)

Ref. No.	Part No.	Description	Per/Set
DIODES			
S D1~24	MA162A	MA150IR	24
SWITCHES			
	SSPG6001A	Rubber Switch (6 continuous)	4

MKB 3 MANUAL KEYBOARD 3 CIRCUIT (Products for SX-K500)

	Ref. No.	Part No.	Description	Per/Set
		DIODES		
S	D13~24	MA162A	MA150IR	12
		SWITCHES		
		SSPG6001A	Rubber Switch (6 continuous)	2

CPR CONTROL PANEL RIGHT CIRCUIT

	Ref. No.	Part No.	Description	Per/Set
		INTEGRATED CIRCUITS		
○	IC1	SVIGM603A121	Gate Array	1
	IC2~4	SVIGM74LS07	Hex Buffer O.C.	3
		TRANSISTORS		
○	Q1~4	2SA830SB		4
		DIODES		
	D1~72	MA165TA5		72
		LIGHT EMITTING DIODES		
○	D73	SVDGSEL4214S	LED (red), SX-K700 only	1
○	D74, 75, 102	SVDGSEL4214S	LED (red), SX-K500 only	3
	D76~93, 98~100, 103~123, 128~136, 158	SVDGSEL4117R	LED (red)	52
	D94~97, 101, 124~126, 137~144	SVDGSEL4417G	LED (green)	16
		RESISTORS		
	R2	ERDS2TJ184	180KΩ	1
	R3	ERDS2TJ221	220Ω	1
	R4	ERDS2TJ103	10KΩ	1
	R5	ERDS2TJ152	1.5KΩ	1
	R6~14	ERDS2TJ103	10KΩ	9
	R15	ERDS2TJ152	1.5KΩ	1
	R16	ERDS2TJ103	10KΩ	1
	R17	ERDS2TJ152	1.5KΩ	1
	R18	ERDS2TJ103	10KΩ	1
	R19	ERDS2TJ152	1.5KΩ	1
	R20	ERDS2TJ103	10KΩ	1
	R21	ERDS2TJ152	1.5KΩ	1
	R22~39	ERDS2TJ470	47Ω	18

	Ref. No.	Part No.	Description	Per/Set
		CAPACITORS		
○	Ⓚ C2	ECEA0JK101	100μF, 6.3V	1
	○ C4	ECCR1H101J	100PF	1
	Ⓚ C5	ECEA1HK010	1μF, 50V	1
	○ C6, 7	ECKR1E473ZV	0.047μF	2

CPL CONTROL PANEL LEFT CIRCUIT (SX-K700)

	Ref. No.	Part No.	Description	Per/Set
		INTEGRATED CIRCUITS		
○	IC1	SVIGM603A121	Gate Array	1
	IC2~4	SVIGM74LS07	Hex Buffer O.C.	3
		TRANSISTORS		
○	Q1~4	2SA830SB		4
		DIODES		
	D1~48	MA165TA5		48
		LIGHT EMITTING DIODES		
	D49~57, 103~105	SVDGSEL4417G	LED (green)	12
	D58~102, 106	SVDGSEL4117R	LED (red)	46
○	D107, 108	SVDGSEL4214S	LED (red)	2
		COMPONENT COMBINATIONS		
	Z1	EXBP88103JM	10KΩ×8	1
	Z2	EXBP84152JM	1.5KΩ×4	1
		VARIABLE RESISTORS		
	VR1, 2	EVD06510B24G	20KΩ B, Main Volume, Tempo Control	2
		RESISTORS		
	R2	ERDS2TJ184	180KΩ	1
	R3	ERDS2TJ221	220Ω	1
	R4	ERDS2TJ103	10KΩ	1
	R5	ERDS2TJ152	1.5KΩ	1
	R6~9	ERDS2TJ103	10KΩ	4
	R10~25	ERDS2TJ470	47Ω	16
		CAPACITORS		
○	Ⓚ C2	ECEA0JK101	100μF, 6.3V	1
	○ C3	ECKR1E473ZV	0.047μF	1
	○ C4	ECCR1H101J	100PF	1
	Ⓚ C5	ECEA1HK010	1μF, 50V	1

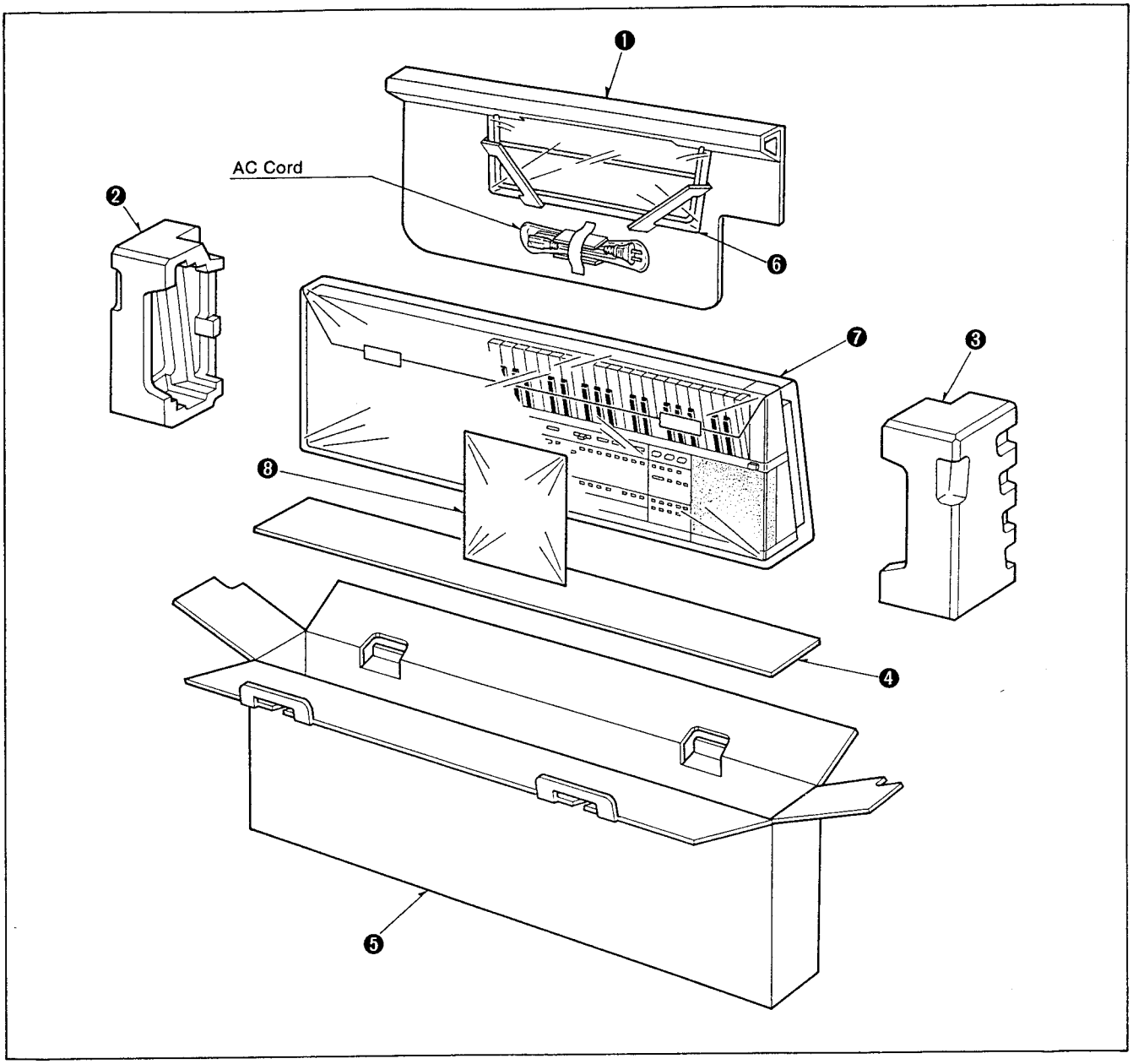
CPL CONTROL PANEL RIGHT CIRCUIT (SX-K500)

	Ref. No.	Part No.	Description	Per/Set
	INTEGRATED CIRCUITS			
○	IC1	SVIGM603A121	Gate Array	1
	IC2, 3	SVIGM74LS07	Hex Buffer O.C.	2
	TRANSISTORS			
○	Q1~4	2SA830SB		4
	DIODES			
	D1~27	MA165TA5		27
	LIGHT EMITTING DIODES			
	D28~62, 66	SVDGSEL4117R	LED (red)	36
	D63~65	SVDGSEL4417G	LED (green)	3
	COMPONENT COMBINATIONS			
	Z1	EXBP88103JM	10KΩ×8	1
	Z2	EXBP84152JM	1.5KΩ×4	1
	VARIABLE RESISTORS			
	VR1, 2	EVD06510B24G	20KΩ B, Main Volume, Tempo Control	2
	RESISTORS			
	R2	ERDS2TJ184	180KΩ	1
	R3	ERDS2TJ221	220Ω	1
	R4	ERDS2TJ103	10KΩ	1
	R5	ERDS2TJ152	1.5KΩ	1
	R6~9	ERDS2TJ103	10KΩ	4
	R10~19	ERDS2TJ470	47Ω	10
	CAPACITORS			
○	Ⓚ C2	ECEA0JK101	100μF, 6.3V	1
	○ C3	ECKR1E473ZV	0.047μF	1
	○ C4	ECCR1H101J	100PF	1
	Ⓚ C5	ECEA1HK010	1μF, 50V	1
	○ C6	ECKR1E473ZV	0.047μF	1

■ WIRING PARTS (See wiring connection diagram on page II-1, II-2)

	Ref. No.	Part No.	Description	Per/Set
	SX-K700			
○		SWKG016ZA	Connector with Wire	1
○		SWKG017ZA	Connector with Wire	1
○		SWKG03103ZA	Connector with Wire	1
○		SWKG06116SSA	Connector with Wire	1
○		SWKG08105LSA	Connector with Wire	1
○		SWKG08108ZA	Connector with Wire	1
○		SWKG1413SSA	Connector with Wire	1
○		SWKG1414SSA	Connector with Wire	1
○		SWKG162SSA	Connector with Wire	1
	SX-K500			
○		SWKG017ZA	Connector with Wire	1
○		SWKG018ZA	Connector with Wire	1
○		SWKG03103ZA	Connector with Wire	1
○		SWKG06117SSA	Connector with Wire	1
○		SWKG08106LSA	Connector with Wire	1
○		SWKG08109ZA	Connector with Wire	1
○		SWKG1413SSA	Connector with Wire	1
○		SWKG1414SSA	Connector with Wire	1
○		SWKG163SSA	Connector with Wire	1

PACKING



■ PACKING PARTS

Ref. No.		Part No.	Description	Per/Set
		SX-K700		
		SPNGK700EA	Packing Parts Ass'y	1
1		SPNG1854A	Spacer, for Music Rack	(1)
2		SPNG5675A	Pad, Left Side	(1)
3		SPNG5676A	Pad, Right Side	(1)
4		SPNG1856A	Pad, Bottom	(1)
5		SPNG1852A	Carton Box	(1)
6		SPHG1770A	Polyethylene Bag	1
7		SPHG1750A	Polyethylene Bag	1
8	EN	SQFGA750	Instruction Book, [EN] area	1
8	M	SQFGA780	Instruction Book, [M] area	1
8	PA	SQFGA790	Instruction Book, [PA] area	1
8		SQFGA760	Instruction Book, other areas	1

Ref. No.		Part No.	Description	Per/Set
		SX-K500		
		SPNGK500EA	Packing Parts Ass'y	1
1		SPNG1855A	Spacer, for Music Rack	(1)
2		SPNG5675A	Pad, Left Side	(1)
3		SPNG5676A	Pad, Right Side	(1)
4		SPNG1857A	Pad, Bottom	(1)
5		SPNG1853A	Carton Box	(1)
6		SPHG1770A	Polyethylene Bag	1
7		SPHG1760A	Polyethylene Bag	1
8	EN	SQFGA750	Instruction Book, [EN] area	1
8	M	SQFGA780	Instruction Book, [M] area	1
8	PA	SQFGA790	Instruction Book, [PA] area	1
8		SQFGA760	Instruction Book, other areas	1